ZOOM-IN & ZOOM-OUT
HUMAN RIGHTS
SUSTAINABILITY
LEGACY

RHINE-RUHR 2025

FISU
WORLD
UNIVERSITY
GAMES
SUMMER



POST GAMES PAPER

EN

#SDGS ARE ALL-IN!



AS OF: **APRIL 2026**

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RHINE-RUHR
2025

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FOREWORD



NIKLAS BÖRGER

CEO - Rhine-Ruhr 2025 FISU World University Games

Dear readers and interested parties,
dear sports enthusiasts and supporters of the Rhine-Ruhr 2025 FISU World University Games,

The summer of 2025 was marked by an extraordinary sporting event: with the Rhine-Ruhr 2025 FISU World University Games, the international sporting world turned its attention to Germany — and in particular to North Rhine-Westphalia and Berlin. In six cities — Bochum, Duisburg, Essen, Mülheim an der Ruhr, Hagen and Berlin — some 9,200 student-athletes and officials from more than 100 nations came together. They formed the heart of the event: in more than 20 venues, top sporting performances were delivered in 18 sports, accompanied by a diverse cultural programme. Together with numerous volunteers, partners, universities and visitors, the student-athletes turned the Games into a unique celebration of sport, culture, academia and encounter.

Organising and delivering this major event was an honour, but also a great responsibility. Our ambition was to show that sport in Sportland.NRW is not only a deeply rooted tradition but can also act as an engine for sustainable societal development. Alongside the sporting competitions, the Games were therefore also a platform for intercultural community, for the exchange of knowledge and ideas, and for the contribution of sport to sustainable transformation — nationally and globally.

Key elements of our strategy were the decentralised delivery across North Rhine-Westphalia and Berlin and the use of existing infrastructures. With the post-industrial infrastructures of the Ruhr region, we deliberately put the spotlight on places that stand for change and transformation, and we modernised existing Sports Venues. This created foundations that can serve as a role model for future sporting events and show that Germany is ready for international sporting events of this magnitude.

The Rhine-Ruhr 2025 FISU Games were not only a major sporting event but also a learning process. Embedding and implementing sustainability, human rights and diversity remains an ongoing commitment. With our concepts, projects and partnerships we have taken steps in this direction, while being fully aware that they must be continued, reviewed and deepened.

At the heart of our approach stood a holistic perspective, guided by the human rights conventions and the 17 global Sustainable Development Goals (SDGs). Together with the Federal Government, the State Government of North Rhine-Westphalia, the host cities, the participating universities and all staff members of a dynamic Organising Committee, we worked to create a positive Legacy that reaches beyond the event itself.

This Post-Games Paper aims to make transparent which sustainability activities were implemented, which impacts can be shown, and which challenges we faced along the way. It is addressed to everyone interested in more sustainable sporting events and in the role of sport in a more sustainable and just society — and it is an invitation to help shape and carry forward the transition in and through sport.

With sincere thanks to all those involved and contributing, who made the Rhine-Ruhr 2025 FISU World University Games possible.

Kind regards,



Niklas Börger

FOREWORD



UNIV.-PROF. DR. HOLGER PREUSS

Supervisor Legacy & Sustainability - Rhine-Ruhr 2025 FISU World University Games

Dear readers and interested parties,
dear sports enthusiasts and supporters of the Rhine-Ruhr 2025 FISU World University Games,

The Rhine-Ruhr 2025 FISU World University Games were a unique major event, which combined sport, academia and culture in an impressive way. From the festive Opening Ceremony at the Schauinsland-Reisen-Arena in Duisburg to the closing in the capital Berlin, spectators from Germany and around the world experienced a vibrant, international celebration of university sports across North Rhine-Westphalia and Berlin.

With 234 medal events, the Games programme offered not only top sporting performances but also a platform for socially relevant topics. An important element was the three-day FISU World Conference, which attracted around 150 participants per day and engaged intensively with topics such as mental health in sport and sustainability. FISU President Leonz Eder emphasised in his closing speech that the close connection between university sports and academia, the open cultural programme for the local population, and the friendliness and helpfulness of the volunteers in particular have left a lasting imprint on these Games. The Rhine-Ruhr 2025 FISU Games were therefore not only a sporting but also a societal and intercultural highlight.

The question now arises whether this event has also set new standards in terms of sustainability.

Our team at Johannes Gutenberg-Universität Mainz took on the task of comprehensively analysing the sustainability of the Rhine-Ruhr 2025 FISU World University Games. Working closely with doctoral candidates and students, we developed a scientifically grounded assessment process that examines the event from different perspectives. This involved not only thousands of visitors, but also the volunteers, the delegations with their student-athletes and all staff members of the Organising Committee.

With this study, we aim to live up to the claim of being demonstrably sustainable — socially, environmentally and economically. The present report provides a systematic evaluation along the sustainability strategy communicated in advance in the Pre-Games Paper »Zoom-in & Zoom-out« but does not stop there; it complements the evaluation with additional surveys. In a section on fields of impact and transformation, Anja Kirig turns the view towards the future. This report aims to show which measures were taken, which effects could be achieved, and in which areas there is potential for future events.

Kind regards,



Univ.-Prof. Dr. Holger Preuß

FOREWORD



SVEA THAMSEN & JANINA WEY

Student Board Members of the German University Sports Federation (adh)

Dear readers and interested parties,
dear sports enthusiasts and supporters of the Rhine-Ruhr 2025 FISU World University Games,

As board members of the German University Sports Federation (adh), we are very pleased to present this Post-Games Paper. The Rhine-Ruhr 2025 FISU World University Games stood for sporting excellence and international encounters. Beyond this, they also embodied a deep commitment to sustainability and social change, and presented German university sports as a modern, professional and socially responsible force.

Already in preparation for this major event, the adh in 2023 adopted a comprehensive sustainability concept that anchors sustainability as a central, action-guiding element.

The Rhine-Ruhr 2025 FISU Games mark a milestone by showing how major international sporting events can be made more sustainable and used as a role model for positive change. They were deliberately conceived as a space for learning and development — with the ambition to create effective structures, networks and impulses in university sports and beyond that last longer than the duration of the event.

The concept of combining environmental, social and economic sustainability aimed to generate long-term positive impacts on environment, society and the regional economy. This approach is reflected in the eight focus areas of the sustainability strategy — from the use of existing sports and event venues through low-emission mobility solutions to the promotion of physical activity and health — and was supported by universities, students, volunteers, federations, political actors and municipalities.

The integration of Para Sport, the close involvement of universities and the creation of inclusive spaces for encounter are just some of the examples of how the Games fostered diversity and inclusion and raised awareness for social sustainability. At the same time, the great potential of voluntary engagement became visible — without which the FISU Games would not have been possible, and which also needs stable framework conditions for the sustainable development of university sports in the future.

This Post-Games Paper reflects not only on the measures implemented and the results achieved; it also shows which lessons can be drawn for future major sporting events. It is an invitation to reflect on the influence of sport and to actively use the insights gained — for a more sustainable and more just development in university sports and beyond.

We wish you an enjoyable read!

Svea Thamsen Janina Wey

SUMMARY OF KEY RESULTS

SUSTAINABILITY IN GENERAL

Environmental sustainability	3,61
Economic sustainability	3,62
Social sustainability	4,20
Health-related sustainability	4,06
Cultural sustainability	4,31

ECONOMIC

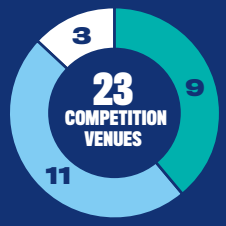
Net impulse for Rhein-Ruhr:
€ 196 M

Regionale **tax revenues**:
€ 6 M

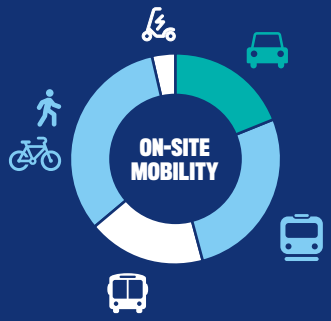
The Rhine-Ruhr 2025 FISU Games generated
3.929 YEARS OF EMPLOYMENT
— in other words, **annual wages**.

ENVIRONMENTAL

Carbon footprint: **73.400,27 tonnes CO2**



- Existing
- Temporary
- Extensive refurbishment



Reuse rate:



- Recycled
- Upcycled
- Unknown

SOCIAL

36,9 % OF VISITORS
were positively influenced by physical-activity programmes towards a healthier lifestyle

~305 HOURS
live broadcasting including inclusive communication services during Games Time

86,3 % VOLUNTEERS
reported an increased willingness to engage in future sporting events

FISU WORLD CONFERENCE:
100 ACTIVE PRESENTERS FROM 23 COUNTRIES
Academic presentations and posters

SUSTAINABILITY FACTS: ORGANISING COMMITTEE

100 %
GREEN ELECTRICITY

SECOND-HAND QUOTAS
~95 % OFFICE FURNITURE
~80 % IT-EQUIPMENT

2 DRINKING-WATER REFILL STATIONS AT HQ

DIVERSITY OF THE OC:
52 % FEMALE
48 % MALE

47 DIFFERENT ATIONALITIES FROM 6 CONTINENTS

31,3 YEARS
AVERAGE AGE

AGE DISTRIBUTION



1 INTRO: SDGS ARE ALL-IN!

»Sport has to take on more responsibility, because it is about respecting human rights and respecting planetary boundaries. Our sustainability motto for Rhine-Ruhr 2025 therefore reads: together, more just, more sustainable – the SDGs are part of the game!«

(Team Legacy & Sustainability Rhine-Ruhr 2025, November 2024)

Ten years after the start of the 2030 Agenda, the »Sustainable Development Goals Report 2025« draws a sobering interim balance: despite visible progress and improvements in the lives of many people, the pace of implementation is not sufficient to achieve all 17 Sustainable Development Goals (SDGs) by 2030. The principle of leaving no one behind remains more urgent than ever.[1] At the same time, climate science warns that seven of the nine planetary boundaries and several tipping points of the Earth system have already been crossed. Effective action is required to halt climate catastrophes and the ongoing loss of ecosystem services.[2]

Sport, with its values — fair play, tolerance, team spirit and commitment — can play a special role. Yet here, too, profound transformations are necessary so that discourse on sustainability is followed by consistent action. All stakeholders in sport are called upon to take responsibility in order to promote sustainable development in and through sport, and to safeguard human rights.

»Sustainability is the task of each and every one, and each and every one bears a high responsibility here.«

(Martin Doulton, FISU EC Member, May 2023)

The Organising Committee (OC) of the Rhine-Ruhr 2025 FISU World University Games took on these challenges and explicitly committed itself, through a Statement of Principles to respecting human rights and promoting sustainability (see p. 180).

Guided by the motto »Everybody plays along!« and carried by the warm hospitality of the Ruhr region and Berlin, the OC designed a unique sports festival that fostered diversity and peaceful coexistence while setting forward-looking impulses — locally and globally. Hosting 18 sports in existing Sports Venues and, in part, on post-industrial sites created an unmistakable atmosphere and opened up new perspectives. In this way, the event connected local society with top international sporting and academic achievements, with intercultural exchange and regional character always at the centre.

This Post-Games Paper on sustainability, human rights and Legacy complements the general Final Report and is intended to contribute substantially to the transfer of knowledge after the Games. It provides deeper insights into the sustainability performance and documents the path from concept to implementation from two perspectives:

- **ZOOM-IN** as internal sustainability management (sustainability strategy)
- **ZOOM-OUT** as external future-oriented analysis (Legacy — fields of impact)

At the heart of the Zoom-in of this report stands the scientific impact study that provides a comprehensive evaluation of the sustainability strategy. It is essentially based on the indicators presented in the Pre-Games Paper (second edition, January 2025) but has been expanded to include additional aspects, some of which were drawn from the Federal Government's »National Strategy for Major Sporting Events«. This event can therefore also be seen as a contribution to the politically desired developments through a major event, providing science-based insights to that end.

The preceding Pre-Games Paper explained the »Zoom-in & Zoom-out« approach, the planning status at that time, and progress in human rights and sustainability work. This approach illustrates the interplay between the Sustainable Development Goals (SDGs), the measures implemented and their short- and long-term effects (Zoom-in), including the intended Legacy (Zoom-out).

Unlike previous FISU World University Games, where sustainability measures were implemented individually, the Rhine-Ruhr 2025 FISU Games followed a holistic approach: sustainability, human rights and Legacy were considered in an integrated manner and addressed comprehensively, within the given resources, in cooperation with universities.

»What made the Rhine-Ruhr 2025 FISU Games especially inspiring is how they brought together academia and sport to deliver real-world impact, while staying true to the spirit of university sport that FISU and its event hosts have carried for the past 75 years. Upholding that spirit, the Rhine-Ruhr 2025 FISU Games set a powerful example of how major sporting events can integrate the many dimensions of sustainability and human rights in practice. Their commitment to environmental responsibility, social inclusion, participant safety, and long-term community benefit reflects the best of university sport and lays a strong foundation for future FISU Games and other sports events globally.«

(Sameer Janmohamed, FISU Head of Sustainability, October 2025)

A central challenge for the organisers lay in **linking human rights with sustainability**. However, the two topic areas overlap in many ways and were — unlike at previous major events — not treated in isolation but considered in an integrative way. Accordingly, measures to protect human rights were defined and implemented within the sustainability strategy, in particular under the aspect of social sustainability.

»As an international space for encounter, sport has the potential to actively strengthen sustainability and the safeguarding of human rights. The consistent linking of both fields of action makes their close relationship visible and creates a solid foundation for impact – beyond the Rhine-Ruhr 2025 FISU Games.«

(Michaela Röhrbein, Executive Board Member Sport Development at DOSB)

Aligning with the UN SDGs requires that human rights are understood as an integral component of sustainability. The strong focus on sustainability simultaneously ensures that the environmental dimension remains visible — in other words, that environmental protection is also human rights protection.

This Post-Games Paper is intended not only to present evaluations, data and facts, but also **to inspire active engagement for sustainable development and for the protection of human rights and the natural environment**. The insights gained offer valuable ideas for future FISU World University Games and, beyond that, provide foundations and good practices for other events, universities, stakeholders and legacy and sustainability research.

Structure

Chapter 2 describes the **framework** of the Games and sets out key programme elements, conceptual guiding principles and the chosen sustainability journey.

Chapter 3 summarises the **sustainability track record of the Organising Committee** and analyses staff satisfaction

The Zoom-in Chapter 4 offers an internal perspective and presents the **evaluation of the social, economic and environmental sustainability strategy** in cooperation with the scientific team and the students of Prof. Dr. Holger Preuß (Johannes Gutenberg-Universität Mainz). It describes **eight focus areas with their objectives, measures and indicators** (see Annex Methodology A) and the resulting impacts. In addition, overarching activities are highlighted as »spotlights« and special events as »recaps«. Selected study results and successful measures are identified as lighthouse projects, and the chapters close with key facts.

In the Zoom-out Chapter 5 the futurologist Anja Kirig adopts an external perspective. She examines the topic of Legacy and analyses it along five **fields of impact and relevant sub- and megatrends**. Chapter 6, the outro, brings together the leverage effects of the internal measures (Zoom-in) with the long-term fields of impact (Zoom-out).



Figure 1: SDG Wheel © United Nations

2 FRAMEWORK OF THE GAMES

The following section first outlines the project context and gives a brief overview of how »Germany's biggest playing field« was shaped in the summer of 2025. It then explains the conceptual foundations along key guiding principles, which formed the basis for the human rights and sustainability measures. Finally, the sustainability journey with its main project milestones as well as the contributions of the students and researchers are presented in this Post-Games Paper.

2.1 GERMANY'S BIGGEST PLAYING FIELD – AND EVERYBODY IS ALL-IN!

The Rhine-Ruhr 2025 FISU World University Games turned Germany into the country's »biggest playing field« in the summer of 2025. Student-athletes and officials from around the world came together to deliver top sporting performances in 18 sports. In doing so, 28 FISU records were broken and more than 1,778 medals were awarded in 234 competitions. Volunteers from the region and from all over the world shaped the Games with their commitment and, together with the Organising Committee, partners and service providers, helped to bring this extraordinary event to life.



RHINE-RUHR 2025 FISU WORLD UNIVERSITY GAMES MANIFESTO

We are organising a colourful, loud and extraordinary summer sports festival that pursues sustainability and brings together the core themes of sport, culture and academia.

› A SUMMER CUM LAUDE!

We use the attributes of the region — geographical proximity, character, rough charm, enthusiasm for sport and the capacity for transformation — and we are:

› PASSIONATELY CONNECTED!

turning the region into::

› GERMANY'S BIGGEST PLAYING FIELD!

We celebrate diversity by being open and low-barrier, and we invite everyone — really everyone — to take part.

› EVERYBODY IS ALL-IN.

The values of the Organising Committee were developed in a LEGO® Serious Play® workshop and through questionnaires for implementation during the preparation phase of the Games.

Values: appreciation, solidarity, courage, flexibility, transparency

Since the summer of 2024, the host cities had been confirmed as Bochum, Duisburg, Essen, Hagen, Mülheim an der Ruhr and Berlin. The urban diversity of Berlin and the dynamic Rhine-Ruhr metropolitan region with its dense university landscape and wealth of sports clubs offered ideal conditions for hosting the Games. In particular, the Ruhr cities — transforming from the »black district« into a »green metropolis« — were meant to encourage engagement with questions of the future, sustainability and transformation. More information on the transformation of the Ruhr region can be found in the »Charta Grüne Infrastruktur« of the Regionalverband Ruhr.

The major sporting event combined **sport with culture and academia**, with a clear focus on **sustainability and participation**. A particular spotlight can be placed on the premiere of Para Sport with the discipline of 3x3 Wheelchair basketball. For the first time, people with physical disabilities were included in the competition programme of the Summer FISU World University Games. The Opening Ceremony, the interactive Rhine-Ruhr 2025 Festival and the Closing Concert framed the multi-sport event with a colourful programme.

Everyone was invited to help shape, experience and play along in this sports festival.

The Rhine-Ruhr 2025 FISU World Conference, the academic heart of the Games, was another highlight alongside the sporting and cultural offerings. Sustainability topics were discussed in an academically grounded and engaged way under the title »Competing for Change: Exploring Sustainability and (Mental) Health through Sports«. The conference venue was the Jahrhunderthalle Bochum, where — in parallel with the sporting competitions in 3x3 Basketball — the Ruhr Games Festival as part of the cultural programme created a striking event experience.

Through this cooperation, an established event format was integrated into the cultural programme at the Jahrhunderthalle Bochum, placing particular emphasis on young talent, action sports and new Olympic disciplines.

Another core element was the **Volunteer Programme**: volunteers supported the Games, received access to competitions, catering, public transport tickets and uniforms, and became part of an international team. The motto »No Games Without U« emphasised the central importance of voluntary engagement and made its contribution visible.





The Torch Relay from January to July 2025 symbolically ushered in the multi-sport event, strengthened community and engagement, and carried the values of sport and education through Germany and the region. The Flame was lit in Turin at the Winter FISU World University Games 2025 and then carried in 12 stages by young committed individuals and prominent figures from sport, academia and politics through the cities of Munich, Stuttgart, Heidelberg, Frankfurt, Erfurt, Cologne, Hamburg, Lübeck, Wuppertal and Dortmund. The Flame was presented at day events in the Host Cities Berlin, Hagen, Bochum, Mülheim an der Ruhr, Essen and Duisburg and, at the close of the Torch Relay, once again ceremoniously lit during the Opening Ceremony of the Games, to shine in all host cities afterwards. Along the regional route, schools, universities and clubs were the main participants, generating visibility and enthusiasm for the event. Volunteers could also apply to carry the Torch. In addition, the municipalities were involved in the planning and supported communication — the mayors carried the Torch as well.

2.2 GUIDING PRINCIPLES

In line with the Statement of Principles on the respect for human rights and on sustainability (see p. 180), the following guiding principles were developed together with Prof. Dr. Holger Preuß in 2023 and further refined in participatory student-led concept processes. They formed the conceptual foundation and at the same time served to sharpen the understanding of sustainability.

GUIDING PRINCIPLE 1: ALIGNMENT WITH INTERNATIONAL AND NATIONAL FRAMEWORKS

The concept is based on central international and national agreements, frameworks and strategies (see Figure 2). These include the vision of **sustainable development** formulated in the Brundtland Report — a development that meets the needs of the present without risking that future generations cannot meet their own needs.[3] With the 2030 Agenda adopted at the UN Climate Summit in 2015 and its 17 Sustainable Development Goals (SDGs), a central foundation was created, of which the respect for and promotion of human rights is also a part.

> »We envisage a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination; of respect for race, ethnicity and cultural diversity; and of equal opportunity permitting the full realization of human potential and contributing to shared prosperity.«
>
> (United Nations, 2015)[4]

The German UNESCO Commission emphasises that, alongside the three classical dimensions of sustainable development — ecology, social affairs and economy — culture should also be considered and promoted more strongly as a fourth dimension.[5] This understanding is clearly reflected in the basic concept of the Rhine-Ruhr 2025 FISU World University Games.

To illustrate the interrelationship between sustainability and **Legacy**, it is also useful to draw on the understanding from the frameworks of the IOC:[6]

> »Legacy and Sustainability are interrelated and complementary, but distinct. While legacy refers to the long-term benefits, or outcomes, of putting the vision into practice, sustainability refers to the strategies and processes applied in decision-making to maximise positive impacts and minimise negative impacts in the social, economic and environmental spheres.«
>
> (IOC, 2017, S. 17)[6]

International treaties	Organisational guidelines	National strategies
Universal Declaration of Human Rights (AMER)	IOC Sustainability Strategy, IOC Legacy Strategic Approach, IOC Strategic Framework on Human Rights	Germany's Sustainable Development Strategy
UN Human Rights Conventions	GRI Event Organizers Sector Discloser	Sustainability strategy of North Rhine-Westphalia
UN Guiding Principles on Business & Human Rights	Event Management according to ISO 20121	Sustainability Strategy of Berlin
UN 2030 Agenda	German Sustainability Code (DNK)	National strategy for major sporting events
ILO Core Labour Standards	DOSB Sustainability strategy, DOSB Human rights policy	
Paris Climate Agreement	adh Sustainability concept	
European Convention on Human Rights (ECHR)		
European ›Green Deal‹		

Figure 2: Central international and national guidelines

GUIDING PRINCIPLE 2: PLANETARY BOUNDARIES, TIPPING POINTS AND THE PRINCIPLE OF STRONG SUSTAINABILITY

Concerning nine central biophysical systems and processes — which regulate the functioning of the earth's life-support systems and determine their stability — planetary boundaries have been defined. Seven of these have already been crossed. They also interact with and reinforce one another, for example in the context of climate change, biodiversity loss, ocean stress, disruption of biogeochemical cycles, land-use change and excessive freshwater consumption. These developments make clear that sustainable action is indispensable if we are to safeguard the resilience of the Earth system and the well-being of humanity — including in the context of sport.[7] Current and ongoing analyses are provided by the ›Planetary Health Check‹, which has been published by the Potsdam Institute for Climate Impact Research since September 2024.

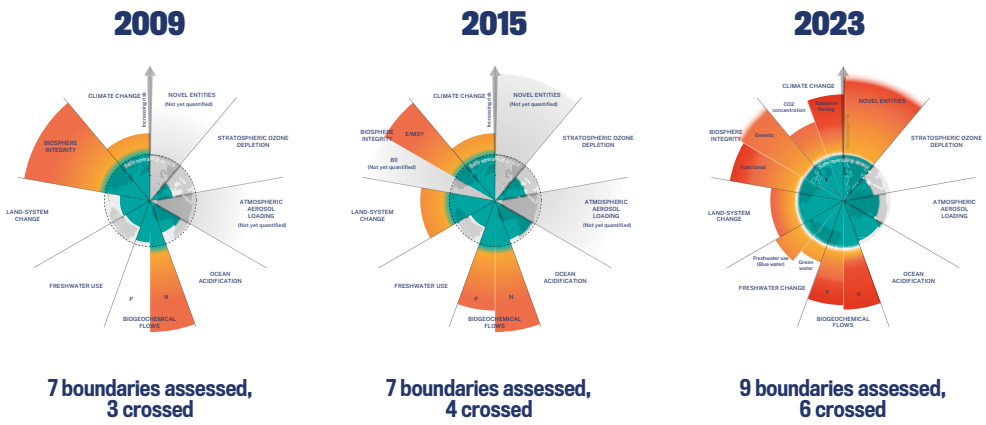


Figure 3: The nine planetary boundaries © Azote for Stockholm Resilience Centre, Stockholm University CC BY-ND 3.0, based on analyses in Richardson et al. 2023.

In addition to the planetary boundaries, scientists have identified so-called tipping points. These are thresholds whose crossing can cause central components of the Earth system to shift into a new, often irreversible state.[8]

The **principle of strong sustainability** emphasises that an intact environment is the foundation of social and economic stability. Societal and economic developments must therefore take place within planetary boundaries. The so-called »Wedding Cake« representation of the SDGs illustrates this principle: the biosphere, with its ecological goals, forms the base on which societal and economic goals are built.



Figure 4: SDGs Wedding Cake © Azote for Stockholm Resilience Centre, Stockholm University CC BY-ND 3.0.

GUIDING PRINCIPLE 3: TRANSPARENCY AND PARTICIPATION

Active engagement of relevant stakeholder groups and transparent reporting were at the centre. Open exchange throughout all project phases as well as the involvement of external experts, students and universities were intended to build trust and foster a shared sense of responsibility for the goals of the sustainability strategy.

GUIDING PRINCIPLE 4: LEVERAGE EFFECTS AND PRIORITISATION

The (ecological) **footprint** highlights the negative impacts of action. The core message is: make cuts, save resources and identify the leverage for change, in order to minimise the footprint. By contrast, the **handprint** focuses on the positive impacts of human activities. Its core message is: bigger and more is better. The handprint speaks to everyone and invites all people to engage in an organisation or in civil society. Sustainability thereby becomes a collective task and a challenge for society as a whole, which we all have to tackle together. Further information is available on the following sites: handabdruck.org, handabdruck.eu

The futurologist Anja Kirig emphasises that by encouraging organisations and individuals to enlarge their handprint, they actively contribute to reducing the (ecological) footprint and thus ultimately make a positive contribution to Legacy.

In the info boxes »Sustainability is a joint effort« in Chapter 4, (sports) organisations and private individuals will find tips and pointers for enlarging their handprint.

Alongside the strategic anchoring of sustainability in the mission statement, its effective implementation requires carefully selected measures with high leverage. A prerequisite for this is a systematic analysis of the needs of the region as well as of the personnel, financial and time resources deployed. On this analytical basis, the central fields of action and measures of the sustainability strategy were prioritised. At the same time, close teamwork with internal and external stakeholders proved decisive in order to increase both the effectiveness and the reach of the measures implemented.

GUIDING PRINCIPLE 5: CONTINUOUS OPTIMISATION PROCESS, MONITORING AND EVALUATION

Sustainability management was guided by the **Plan-Do-Check-Act Cycle** in order to ensure that the defined goals could be achieved as well as possible according to the **SMART rule** (specific, measurable, achievable, relevant, time-bound). Evaluation was planned from the outset and academically accompanied. The results are documented in the Zoom-in Chapter 4.

These **five guiding principles** provided orientation and gave concrete shape to the sustainable understanding underpinning the Rhine-Ruhr 2025 FISU World University Games. In this way, a clear roadmap was established early on — to systematically develop the understanding of sustainability, to steer its implementation in a targeted manner and, in the following chapters, to evaluate it.



2.3 SUSTAINABILITY JOURNEY

The sustainability journey outlined here gives an overview of the central project phases and milestones. The individual steps — in particular the process of deepening the human rights work — are explained below. This section also documents the sustainability contributions of students and universities.

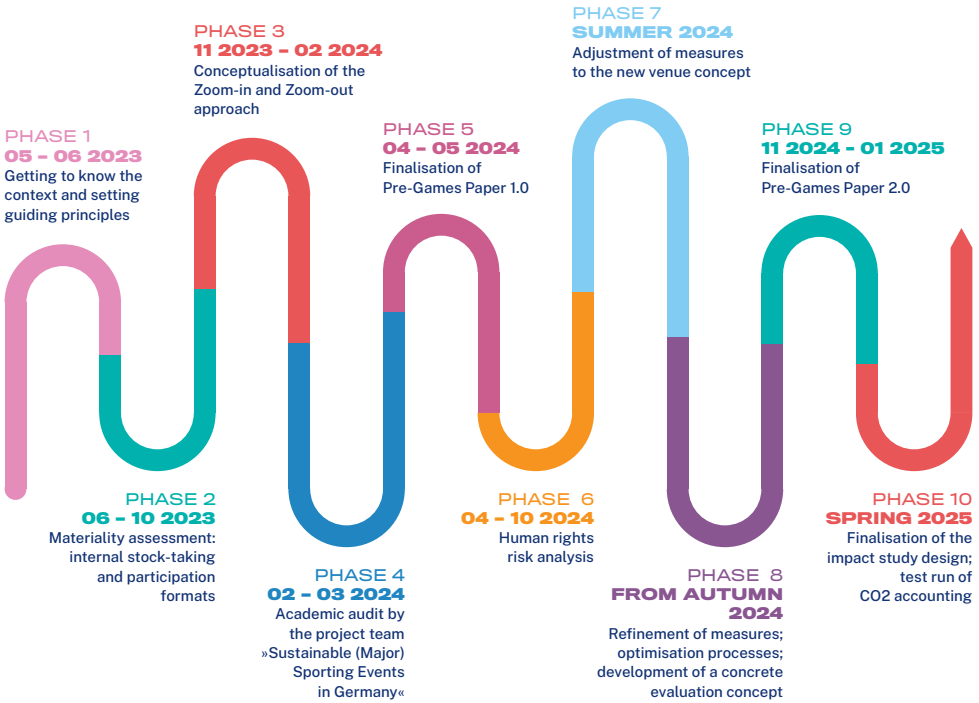


Figure 5: Overview of central project phases

2.3.1 CONCEPT DEVELOPMENT AND ACADEMIC AUDIT

After Phase 1 had addressed the context and set guiding principles (see previous chapter) as the conceptual foundation and a clear roadmap, a comprehensive stock-taking began in the summer of 2023. At the same time, the involvement of universities through a workshop format and a digital survey among national sports federations in the period from June to October 2023 aimed to gather and discuss expectations, impulses and concrete ideas for a shared vision of the Rhine-Ruhr 2025 FISU World University Games.

CONTENT OF THE LEGACY & SUSTAINABILITY UNIVERSITY WORKSHOP AND SPORTS FEDERATIONS' SURVEY

In cooperation with Prof. Dr. Holger Preuß, central questions were developed in order to jointly write an optimal but realistic vision for the future of Rhine-Ruhr 2025:

01 **Scenario field:** Which areas are decisive in order to use the Rhine-Ruhr 2025 FISU World University Games to drive sustainability forward in innovative ways?

02 **Key factors:** In what ways can the Rhine-Ruhr 2025 FISU World University Games create added value or act as a catalyst with regard to environmental and societal topics?

03 **Desired successes, target states and seeds of a vision:** Which Legacy and which sustainability goals should the Rhine-Ruhr 2025 FISU World University Games definitely pursue or achieve?

Workshop participants: around 150 people, including students, doctoral candidates and representatives of university sports from 15 universities in Germany and Switzerland
Survey participants: 11 national and involved sports federations

The results of the stock-taking, data and insights from previous major sporting events and from the participation formats were consolidated in a materiality matrix (see Figure 6) in order to assess the relevance for internal and external stakeholders as well as the impacts of the event. This summary assessment served the well-founded prioritisation of essential fields of action — referred to from then on as focus areas.

MATERIALITY MATRIX

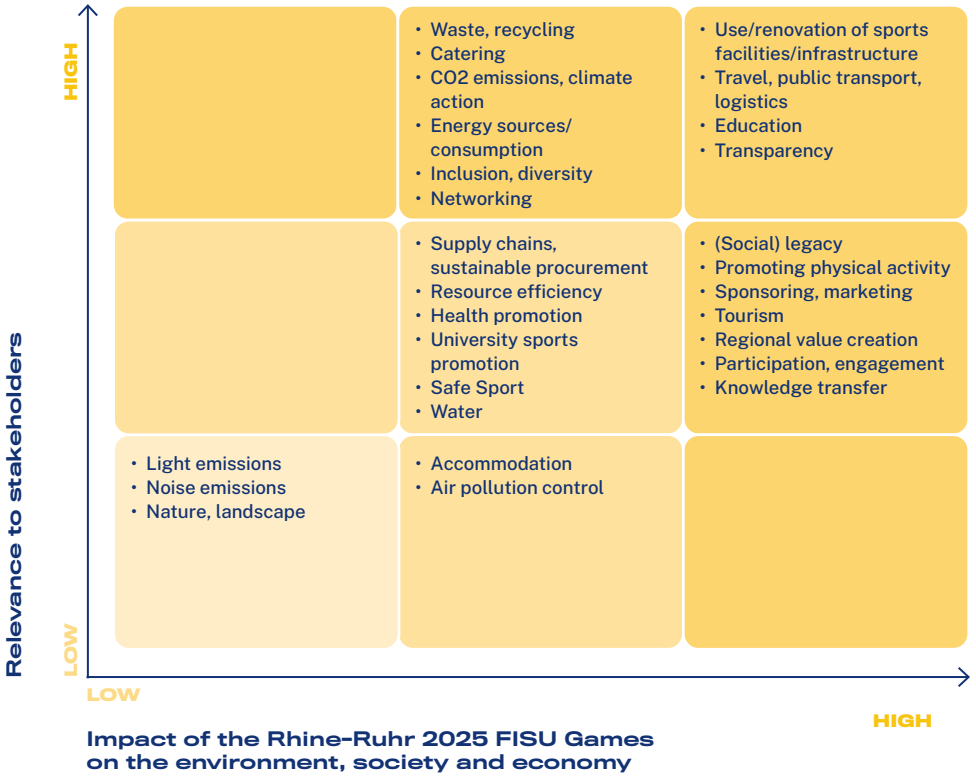


Figure 6: Materiality matrix

In a further step, objectives and indicators were defined per focus area and a catalogue of measures was drawn up. **The eight focus areas form the core of the sustainability strategy, which is subject to a dynamic optimisation process** — for example through knowledge exchange, workshops and conversations with those affected.

In the first quarter of 2024, the project team ›Sustainable (Major) Sporting Events in Germany‹ of the Deutsche Sporthochschule Köln carried out an **academic audit**. This was used to critically review the original objectives and indicators of the strategy, and recommendations were incorporated into the sustainability strategy.

2.3.2 HUMAN RIGHTS WORK

In spring 2024, a comprehensive process of deepening the human rights work began. An important step was the kick-off workshop »Human Rights and Major Sporting Events« held in April 2024 with Sylvia Schenk (head of the Sport Working Group at Transparency International Deutschland e. V.). This workshop trained both selected internal staff and representatives of the adh, and initiated the risk analysis in cooperation with the Johannes Gutenberg-Universität Mainz. Data collection and analysis took place between summer and autumn 2024. The aim was to identify actual as well as potentially adverse impacts on human rights and, on this basis, to develop a well-founded Statement of Principles. In addition, existing concepts of the Organising Committee were validated and further preventive measures were derived.



Figure 7: Central areas analysed in the risk analysis

The risk analysis conducted in cooperation with Klein (2024)[9] identified and assessed human rights risks for hosting the Rhine-Ruhr 2025 FISU World University Games in six central areas (see Figure 7). The following groups of persons were considered: women, children, the LGBTQ+ community, People of Colour, religious and cultural minorities, people with disabilities, student-athletes and officials, visitors, employees, volunteers and journalists.

The risks were assessed on the basis of their impact and likelihood of occurrence, and the results of the analysis were presented in a risk matrix (see Figure 8). Risks in the areas of integrity, legality, safety & security as well as discrimination & abuse were rated as particularly critical, as they showed both an increased probability of occurrence and significant impacts.

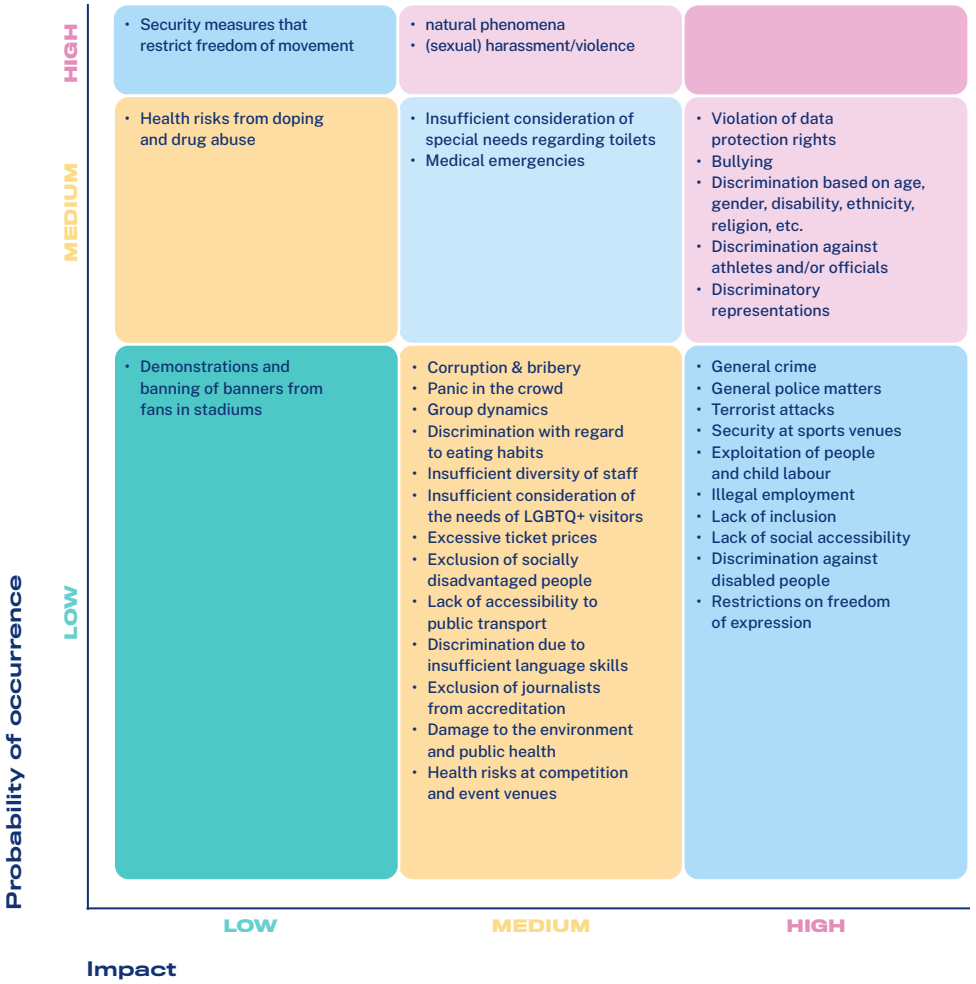


Figure 8: Risk matrix

Preventive measures for the respect of human rights and the avoidance of negative impacts are essential in order to protect the rights of all those involved. Existing concepts (in some cases not located within the sustainability strategy but integral concepts of the Organising Committee) were reviewed for the six risk areas. The following priorities of human rights work emerged from the risk analysis:

(1) Integrity, legality, safety and security: A comprehensive safety and security concept, compliance with European data-protection standards and targeted internal training ensure the protection of human dignity, the safeguarding of fundamental rights and the security of all those involved in the event.
(2) Violence, abuse and discrimination, as well as
(3) Equality, diversity, accessibility and inclusion: Any form of interpersonal violence (including physical, psychological, sexualised) and abuse (including online), as well as discrimination (including cultural, racist, ethnic, gender-based, religious or structural forms), is not tolerated in any form. Accessibility measures ensure participation, while a comprehensive awareness concept acknowledges the particular protection needs of children, women, the LGBTQ+ community, People of Colour, religious and cultural minorities and people with disabilities, and ensures that any form of discrimination, violence and abuse is actively countered (see pp. 58–66).
(4) Working conditions: Statutory labour standards as well as the right to fair wages and to safe, inclusive working conditions are strictly observed and actively promoted. Clear contractual provisions ensure that fair working conditions are also guaranteed with external service providers and in the supply chain.
(5) Freedom of assembly, expression and the press: The right to freedom of assembly, freedom of expression and uncensored reporting is respected and actively supported. The official accreditation procedure ensures journalists' access to the event and protects the freedom of the press.
(6) Health and well-being: Emergency medical services and personnel are provided at all sports and event venues. These are complemented by awareness-raising measures and programmes to promote health and well-being (see pp. 54–57).

The analysis did not identify any significant gaps in the six areas examined. Nevertheless, the process of optimising the measures continues to be regarded as dynamic. Following consultations with Klein (2024) and further human rights experts, an effective grievance mechanism linked to the awareness concept was planned, which is intended to create a digital »Safer Space« and ensure access to remedy (see pp. 64–66).

2.3.3 ACADEMIC SUSTAINABILITY CONTRIBUTIONS

For the OC of the Rhine-Ruhr 2025 FISU World University Games, the involvement of students was of great importance. Through academic theses, university seminars and research projects as well as the targeted deployment of students as volunteers, sustainability management could be improved and broadened. Through their participation, students gained direct insights into the planning processes and challenges of a major sporting event and were actively involved in developing solutions. In addition to university partnerships and further cooperations (see pp. 105–116), the following table documents the sustainability contributions achieved.

UNIVERSITY STUDY PROGRAMME / CHAIR	COOPERATION & TOPIC	COMPLETION
Hochschule Rhein-Waal B.A., Sustainable Tourism	*Academic thesis:* Sustainability strategies and their implementation at major sporting events — the case study of the European Championships Munich 2022 and recommended actions for the Rhine-Ruhr 2025 FISU World University Games	March 2024
Hochschule Rhein-Waal B.A., Sustainable Tourism	*Academic thesis:* A proposal for assessing staff sustainability awareness at major sporting events — the example of the Rhine-Ruhr 2025 FISU World University Games	May 2024
Ruhr-Universität Bochum Chair of Sport Management and Sport Consulting	*Seminar paper:* Waste management at the Rhine-Ruhr 2025 FISU World University Games	July 2024
Johannes Gutenberg-Universität Mainz M.Sc. Int. Sportmanagement	*Academic thesis:* Human rights at sports events — a human rights declaration for the Rhine-Ruhr 2025 FISU World University Games	Oct. 2024
The Hague University of Applied Sciences International Sport Management	*Academic thesis:* What are the challenges of integrating stakeholder perspectives into the sustainable management of polycentric sports events for the Rhine-Ruhr 2025 FISU World University Games?	Dec. 2024
Rheinland-Pfälzische Technische Universität Master of Education	*Academic thesis:* Development of an innovative format to promote Education for Sustainable Development at the FISU World University Games 2025	May 2025
Universität Bielefeld M.A., Sport Science — Organisational Development and Management	*Academic thesis:* Sustainability of major sporting events — a qualitative analysis using the example of the Rhine-Ruhr 2025 FISU World University Games Summer	July 2025
The Hague University of Applied Sciences Bachelor, International Sport Management	*Academic thesis:* Based on the case of Rhine-Ruhr 2025, how can the measurement accuracy and process efficiency of future FISU events' company carbon footprint reporting be improved?	July 2025
Hochschule Ruhr West Campus Mühlheim Institute of Natural Sciences	*Transatlantic Summer School 2025 in cooperation with Hochschule Harz and universities in Iowa and Detroit:* case study focused on the sustainability performance of the Rhine-Ruhr 2025 FISU Games and the role of specific stakeholder groups	Aug. 2025
IST-Hochschule für Management Master, Sportbusiness Management	*Academic thesis:* Social sustainability of the Rhine-Ruhr 2025 FISU World University Games — quantitative analysis of satisfaction and perceived event quality of people with disabilities	Oct. 2025
Eberhard Karls Universität Tübingen M.Sc. Sportmanagement	*Academic thesis:* Sustainability management of large sports events. A comparison of data types/data collection methods for calculating the carbon footprint of major sporting events using the example of the FISU World University Games 2025	Nov. 2025
Hochschule Bremen M. Sc., Interdisciplinary Sustainability Management	*Academic thesis:* Active cycling mobility at the Rhine-Ruhr 2025 FISU World University Games: implications for sustainable transport strategies of a possible Olympic bid in NRW	Nov. 2025
Universität Bayreuth MBA, Sportmanagement	*Academic thesis:* International understanding through major sporting events — intercultural contact at the FISU World University Games 2025 and its effects on attitudes towards other cultures	Dec. 2025
Ruhr-Universität Bochum Chair of Environmental and Resource Economics and Sustainability	*Field experiment:* on sustainable consumption behaviour in public catering areas during the FISU World University Games 2025 at the Messe Essen venue	Jan. 2026

UNIVERSITY STUDY PROGRAMME / CHAIR	COOPERATION & TOPIC	COMPLETION
Johannes Gutenberg-Universität Mainz M. Sc., International Sport Management, and B.A. Sport Science	*Academic theses on the following topics:* 1) Promotion of physical activity in the context of the FISU World University Games 2) Potentials of major sporting events for local sports clubs — a mixed-methods analysis of benefits and membership development using the example of the FISU World University Games Rhine-Ruhr 2025 3) Strengthening international networking through the FISU World University Games 4) Regional location effects of the FISU World University Games in the Rhine-Ruhr area 5) Measures and perception of anti-discrimination in the context of the FISU World University Games 6) Education and learning opportunities in the context of the FISU World University Games 7) Health promotion and eating behaviour at the FISU World University Games 8) Social identification and national consciousness through major sporting events: a quantitative study at the FISU World University Games 2025 9) Social cohesion and national consciousness at major sporting events: a quantitative study within the Organising Committee of the FISU World University Games 10) Sustainable waste and resource management at the FISU World University Games 11) Motivation and entry experiences of first-time volunteers at the FISU World University Games	Feb. 2026

3 THE ORGANISING COMMITTEE

To deliver the Rhine-Ruhr 2025 FISU World University Games, a non-profit Organising Committee (OC) was founded in 2021. During the planning phase it was accompanied by a Board of Trustees as well as a Funding and Strategy Council, both of which took on advisory functions. In addition, in the five original host cities, Local Organising Committees (LOCs) supported organisational processes on the ground and contributed valuable context-specific expertise.

A particular priority was an active and structured knowledge transfer to and from staff. The OC therefore employed both staff who already brought experience from previous national and international major sporting events and students and graduates who could contribute new perspectives and current academic approaches. The average age of the OC staff was 31 years. The Legacy & Sustainability team of the OC was also in continuous exchange with local and supraregional stakeholders in the fields of sustainability and human rights in sport in order to integrate external expertise.

To anchor sustainable action in day-to-day administration, the OC developed a »Sustainability Roadmap«. It was structured around four central fields of action: mobility, energy, resources and awareness. Through regular progress updates and the active involvement of staff, concrete behavioural changes were to be initiated. Improvements in waste separation, for example, could be realised, while copying and printing behaviour could only be changed to a limited extent — a good example of the typical challenges posed by institutional routines.

Social sustainability within the OC team was at the centre. Under the title »Values & Atmosphere«, regular meetings were established for all staff, serving to reflect on shared values, to foster a positive working atmosphere and to raise awareness for aspects of social sustainability. From this internal values work, various measures emerged, of which selected results are presented below:

- **Values visuals** for everyday presence towards internal and external stakeholders in the office
- **Informal feedback box and types of feedback**
- **Appreciation cards** that can be sent to colleagues

The comparatively young team was able to gain diverse learning experiences during their work, go through individual development processes, bring in new perspectives and achieve personal growth in competence. In addition, the OC wanted to strengthen social sustainability within the organisation. From the staff's perspective, this aspiration was largely achieved, as shown in the final evaluation process (Master's thesis by Marvin Knab, Johannes Gutenberg-Universität Mainz). To this end, various aspects of the personal work environment were to be rated on a scale from 1 (»do not agree at all«) to 5 (»fully agree«) (see Annex Methodology B). Staff satisfaction was measured using the SERVQUAL model, which captures the gap between expectations and actual perception of the work environment. The value shown indicates satisfaction: means above the neutral value (3) are positive, while a negative gap score (value in brackets) shows that expectations were higher than perception.

Tangible resources:



3,38 (–1,05)

Reliability:



3,70 (–1,04)

Responsiveness:



3,56 (–0,88)

Trustworthiness and competence:



3,71 (–0,73)

Empathy:



3,84 (–0,61)

In comparable surveys it is frequently observed that expectations lie almost at the maximum scale value. The gap scores determined make clear that, in the social interaction within the OC, the targeted maximum values could not be reached — although values above 3 do express satisfaction. In order to reduce the gap score, an OC could expand further team-oriented measures and strengthen interpersonal relationships within the OC.

The Rhine-Ruhr 2025 OC specifically promoted social cohesion through team-building measures with a high level of interaction. These included, among others, FA Cups as cross-sport competitions between functional areas. They took place throughout the entire project period and additionally conveyed expertise in all sports of the Games. Complementary project-related milestone events such as the »50 Days to Go« BBQ made collective project progress visible and created lasting, positive group experiences. By contrast, less interactive or more symbolic formats — including the Cleanup Day — and highly specialised activities such as the surf-wave event had only minor effects on perceived cohesion and were assessed by respondents as less effective.

In addition, the national identification of staff was analysed. It represented a sub-goal of the »National Strategy for Major Sporting Events« of the German Federal Government: according to this, major sporting events are meant to strengthen identification with Germany and thereby promote societal cohesion. For the survey, individual items were adopted from the General Population Survey of the Social Sciences (ALLBUS 2014) and integrated into the staff questionnaire of the OC. A comparison of the data revealed clear differences. The aggregated level of the scales was slightly below the population average for both institutional and sport-related national consciousness. However, the individual dimensions showed a clear shift in emphasis: performance-related aspects such as pride in the economy (M = 56.9; ALLBUS: M = 71.5) or in science (M = 62.7; ALLBUS: M = 76.5) were significantly below the population values, while politically-social dimensions such as the fair treatment of all groups (M = 57.6; ALLBUS: M = 50.7) or pride in democracy (M = 65.2; ALLBUS: M = 60.7) were above the population average.

4 ZOOM-IN: SUSTAINABILITY STRATEGY



STRUCTURE OF THE FOCUS AREAS

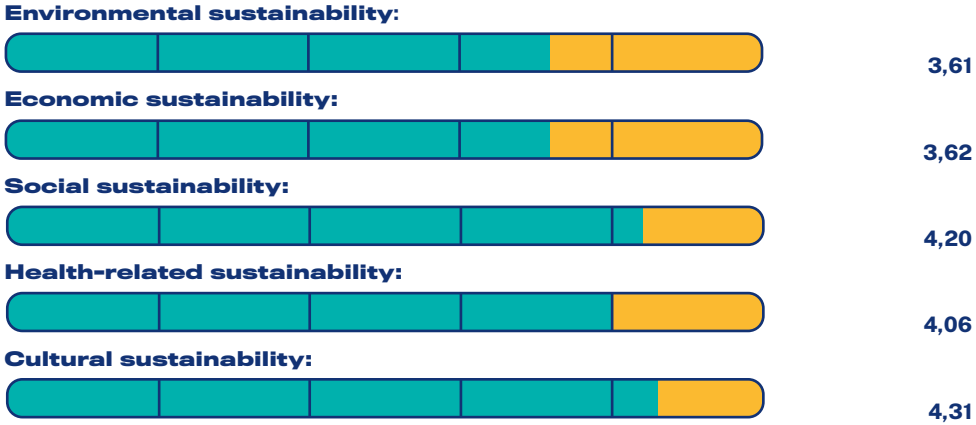
The following chapters are structured along the three classic dimensions of sustainability (ecology, social, economy) in order to present the sustainability contributions of the Rhine-Ruhr 2025 FISU World University Games in a systematic way. Each focus area of the sustainability strategy follows a uniform pattern:

- **Relevance, background and objective**
- **Description of measures including insights**
- **Impact analysis based on indicators**

The academic methodology underpinning the analyses is presented in the Annex of the report.

PERCEPTION OF SUSTAINABILITY
[GENERAL INDICATOR]

Before the sustainability performance of the Rhine-Ruhr 2025 FISU World University Games is presented in the three core dimensions — environmental, economic and social — on the basis of the indicators, the general perception of sustainability is first presented. For this purpose, event participants — consisting of visitors and accredited persons — were asked how sustainable they perceived the event to be overall in five sustainability categories (see Annex Methodology C). Responses could be given between 1 (completely not sustainable) and 5 (completely sustainable), with the value 3 standing for »neither/nor«. The results show that, from the participants' perspective, the Games were most strongly perceived as socially, culturally and health-related sustainable.



4.1 ENVIRONMENTAL SUSTAINABILITY

At major sporting events, environmental sustainability refers above all to the systematic consideration and prioritisation of environmental aspects in planning and implementation. The aim is to design operational processes in such a way that negative impacts on natural resources (ecological footprint) are reduced and at the same time positive, long-term effects (»handprint«) are strengthened.[9]

At the Rhine-Ruhr 2025 FISU World University Games there were four environmental focus areas. They served to specifically reduce the ecological footprint of the event and at the same time to strengthen the positive handprint by bringing sustainable impulses into the host regions and their infrastructures.

- **Utilisation of existing sports and event venues**
- **Low-emission mobility solutions**
- **Renewable energy sources**
- **Resource-friendly procurement and waste management**

The following sub-chapters describe and evaluate these four environmental focus areas and set out the respective measures and associated indicators. In addition, two overarching priority topics are addressed in spotlights: the carbon footprint as a central indicator of environmental performance and the species-protection initiative around Wanda, the mascot of the Games, in cooperation with NABU NRW for the protection of the peregrine falcon.

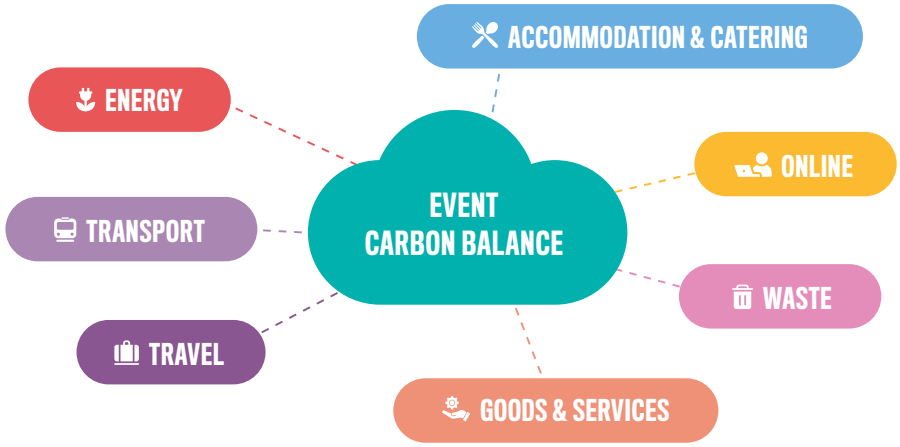


SPOTLIGHT: CARBON FOOTPRINT

A comprehensive view of the environmental impact of the event is provided by the calculation of the carbon footprint (key performance indicator). By presenting the main emission areas as transparently as possible, it makes it possible to identify those fields of action (hereafter defined as categories) in which the ecological footprint can be specifically reduced (see Annex Methodology D).

Event carbon footprint

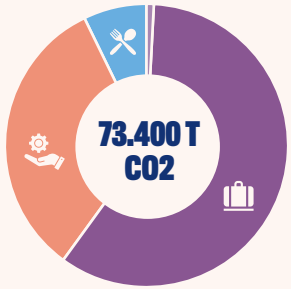
The carbon footprint represents the emissions generated during the Rhine-Ruhr 2025 FISU World University Games in kilograms of carbon dioxide equivalents (CO_2e) and refers to the event days from 16 to 27 July 2025 (plus a few days of arrival and departure). The calculation was based on post-Games data. In areas with insufficient or missing data availability, reliable estimates were additionally used. The carbon footprint includes emissions from the categories transport, travel of participants, online media consumption, electricity consumption, goods and services, hotel accommodation, catering and waste.



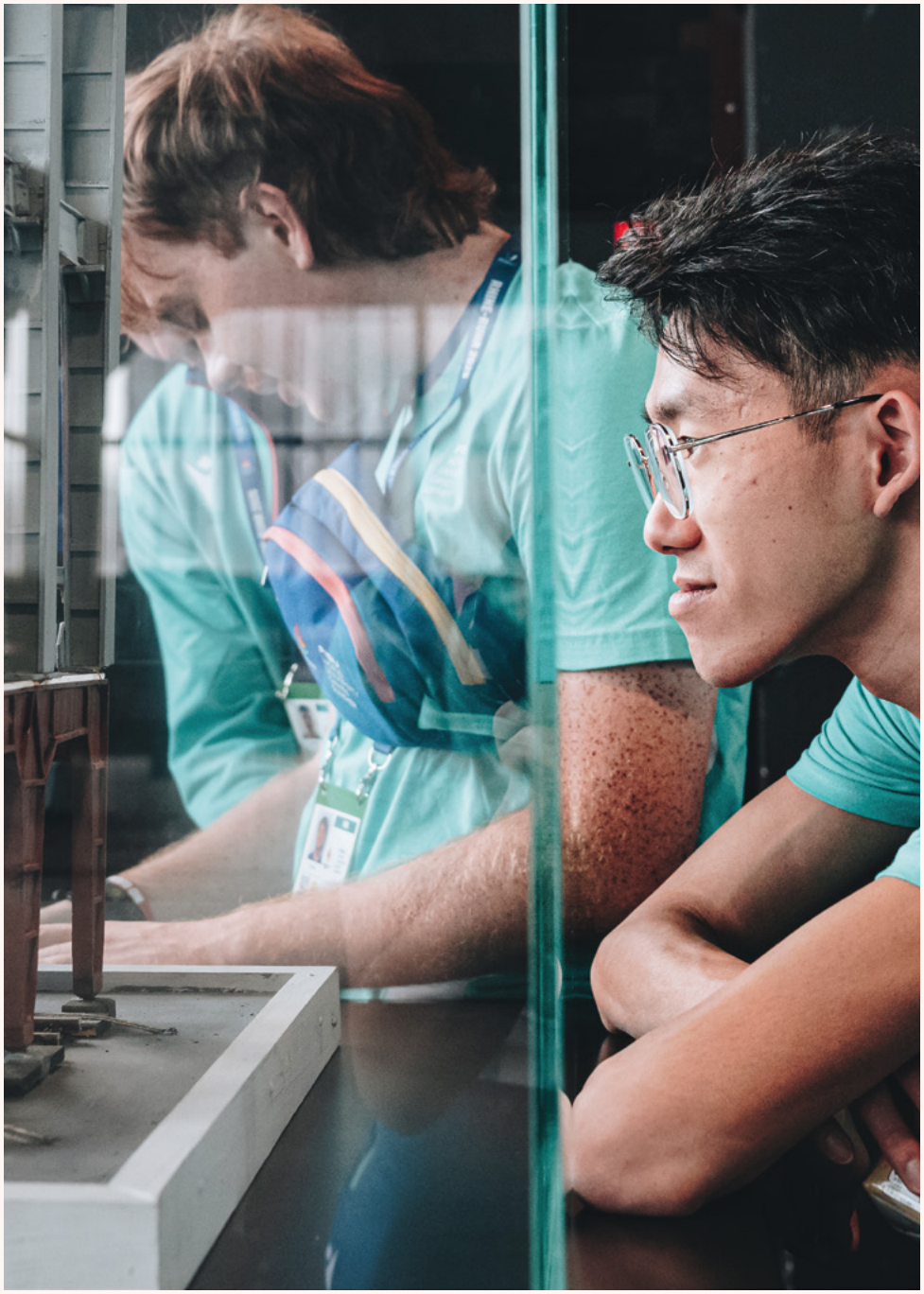
EMISSION CATEGORIES AND FINAL SCOPE

The sustainability categories and the underlying calculation methodology were developed in cooperation with First Climate (see Annex Methodology D). The emission categories for the Rhine-Ruhr 2025 FISU Games are briefly presented below:

1. **Transport:** This category covers the on-site transport of spectators, accredited persons (volunteers, OC staff, student-athletes, etc.) and the materials required for the event.
2. **Travel:** The travel category covers the emissions from the arrival and departure of both spectators and accredited persons.
3. **Online media consumption:** This category takes into account the hours of live broadcasts. Since the OC had no access to the number of streamed hours, this factor is not included in the calculation carried out here.
4. **Energy consumption:** This category covers the electricity and heating energy consumption of all training, competition and non-sport event venues.
5. **Goods and services:** This category takes into account all rented and purchased goods as well as the services obtained.
6. **Accommodation and catering:** This category covers the accommodation and catering of accredited persons but, due to a lack of data, not that of spectators.
7. **Waste:** This category includes the waste generated at all training, competition and other event venues.



TRANSPORT of all spectators and accredited persons	**928** T CO2
TRAVEL of all spectators and accredited persons	**43.418** T CO2
ONLINE-PARTICIPANTS (not fully captured)	**0,2** T CO2
ENERGY (electricity)	**97** T CO2
GOODS AND SERVICES	**23.885** T CO2
HOTEL AND CATERING for accredited persons	**5.064** T CO2
WASTE at and in all venues	**8** T CO2



UTILISATION OF EXISTING SPORTS AND EVENT VENUES VENUES

KEYFACTS

- **Lacking sports venues were built exclusively on a temporary basis**
- **Refurbishments and renovations based on long-term use plans**
- **Subsidisation of refurbishments by the State of North Rhine-Westphalia**
- **Avoidance of new land sealing**

Already during the bidding process, a clear decision was made to primarily use existing local sports and event venues. Taking into account all FISU requirements, the ideal venue was then identified in the host cities for each sport and each cultural event. This made it possible to establish a decentralised and thus as sustainable as possible venue concept that did not require any new construction. In line with the guidelines of the International Olympic Committee, existing sports infrastructure was not only used but also refurbished where it offered long-term benefits (Legacy). Where infrastructure was lacking, it was erected temporarily (mainly in Messe Essen and at the Jahrhunderthalle in Bochum).

The following objectives and measures give substance to this focus area and, on the basis of defined indicators, make it possible to assess the ecological impact produced. In addition, the SDGs to which this focus area is oriented are shown.

OBJECTIVES

- **Hosting sports and non-sports events in existing and modernised sports and event venues**
- **Use of rented, temporary constructions**
- **Highly frequented use of the competition venue**

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Sustainability is a joint effort: Greening infrastructure and climate-adapted planting can be further expanded in the Ruhr region and contributes not only to SDG 11 but also to SDGs 12 and 15. The Internationale Gartenschau Metropole Ruhr 2027 has launched the exciting project »Mein Garten« (My Garden). The focus is on joining in — universities and sports facilities can also get involved. All information is available at iga2027.ruhr/die-drei-ebenen/mein-garten.

Furthermore, the environment and sustainability department of the German Olympic Sports Confederation (dosb.de) as well as municipal climate-protection managers offer advisory points for initiatives to increase sustainability at sports venues.

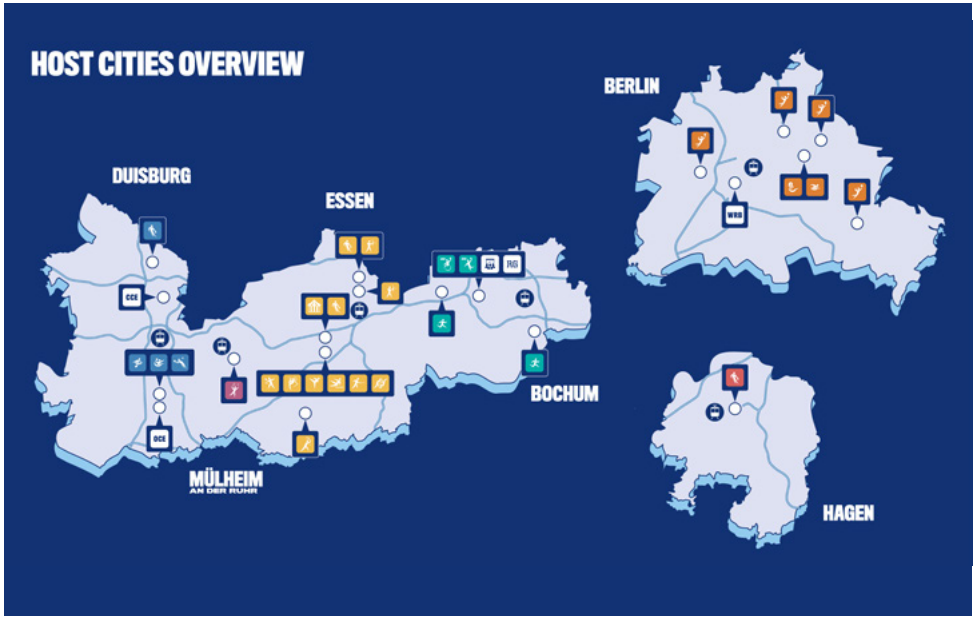
Measures and impact analysis

Renting existing offices

For the OC headquarters, an existing office complex in Düsseldorf was occupied from 2021 to 2025. At Messe Essen, Landschaftspark Duisburg, Lohrheidestadion and the Jahrhunderthalle Bochum, additional workstations were set up between spring and summer 2025, since — as is usual for multi-sport events — the OC decentralised its operations ahead of the Games.

Decentralised Venue concept

In July 2024, the final decentralised Venue concept was published. It relied 100% on existing event venues, supplemented by temporary structures. A total of 23 different sports and event venues in the Rhine-Ruhr metropolitan region and in Berlin were used for the sporting competitions, the academic conference, the official Opening and Closing Ceremonies and the festival programme. As training venues, numerous further sports venues were used, in particular school sports halls in the host cities.



Renting temporary structures

For nine sports (3x3 Basketball, Archery, Artistic gymnastics, Beach volleyball, Fencing, Judo, Rhythmic gymnastics, Table tennis, Taekwondo) the training and competition set-up consisted of temporarily rented venues. In addition, rented event infrastructure — for instance for concert stages and pagodas — was used at the festival sites.

Share of new buildings, existing, renovated and temporary structures

During the Rhine-Ruhr 2025 FISU World University Games, 23 competition venues were used. A clear focus on the preservation of existing infrastructure and on modernising what was already there is evident. Eleven existing sports venues were used without alteration, and three facilities were deliberately modernised or renovated to meet the requirements of international competitions. Nine temporary venues were erected and dismantled or further used after the Games. New constructions were avoided entirely. Overall, 87% of the sports venues used were existing or temporary — underlining the OC's strategic approach of minimising environmental impact. All three refurbishments were designed for long-term follow-up use, so that the Games brought positive effects for the region's sports venue infrastructure.

Utilisation rate of competition venues

During the Rhine-Ruhr 2025 FISU World University Games, an average utilisation rate of 70% was achieved at the sports venues used, indicating efficient use of the available capacities. The additional opening of the official competition areas for youth competitions outside regular competition hours that had originally been planned could not be implemented for organisational reasons. Nevertheless, inclusive formats were realised in a targeted manner: a Para Show-Match took place ahead of the Badminton finals in Mülheim an der Ruhr, and a Special Olympics Show-Match was held at the ETUF facility (see focus area Inclusion — diversity awareness and inclusive participation formats, p. 93). In addition, volunteers also used the facilities outside competition hours for joint sporting activities (for example at Beach volleyball in Sportpark Duisburg), which also strengthened team cohesion. Overall, the goal of also opening up the sports venues to inclusive formats was achieved; the originally intended integration of youth competitions on the official competition areas did not take place.

Modernisation of competition venues with regard to environmental aspects and re-use concepts

To meet international competition requirements and to carry out necessary refurbishment and modernisation measures, the Rhine-Ruhr 2025 OC — with the help of the funding programme »Moderne Sportstätte 2022« of the NRW state government — accelerated the modernisation processes and developed long-term follow-up use plans. A central element of the environmentally and resource-aware approach was the consistent prioritisation of existing infrastructure. This was reflected, among other things, in the decision not to build the originally planned temporary swimming pool and instead to use an existing pool in Berlin.

All 14 non-temporary competition venues used for the Games had concepts for long-term, multi-functional use in place and took into account the needs of universities, clubs and municipalities. This secured the permanent operation of the facilities for grassroots, elite and university sports (Legacy).

The use and adaptation of existing infrastructure avoided additional environmental burdens. Through consistent land conservation, no new areas were sealed for the event. All construction work took place within existing facilities. No new green spaces were created; instead, the focus lay on the ecological upgrading of existing green and open spaces, for instance by using water-permeable eco-paving to improve rainwater infiltration.

Some venues additionally benefited from existing sustainability structures. Messe Essen (Nachhaltigkeitsbericht Messe Essen) has its own sustainability management system, which is documented in a comprehensive sustainability report and includes ecological and social steering mechanisms. Likewise, the UNESCO World Heritage Site Zollverein (Nachhaltigkeitsleitbild Zeche Zollverein) has an institutionally anchored sustainability mission statement that binds ecological, cultural and social responsibility into its operational processes. These conditions had a supportive effect on the sustainability performance of Rhine-Ruhr 2025.

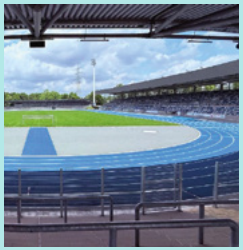
DOCUMENTATION OF THE MOST SIGNIFICANT MODERNISATION MEASURES AND THEIR LEGACY



ETUF: For the Games, the tennis facility of the Essener Turn- und Fechtklub e. V. (ETUF) was comprehensively modernised. The Center Court was fully renewed, the pathways were designed to be barrier-free and additional barrier-free sanitary facilities were created. The result is a high-quality competition venue that already hosted the UTR Pro Tennis Tour in September 2025. The club (35,000 euros), the City of Essen (70,000 euros) and the State of North Rhine-Westphalia (695,000 euros) invested in the modernisation.



REGATTA COURSE: The regatta course in Duisburg was comprehensively modernised after the Canoe Sprint World Championships 2023. The measures included, among others, the start and finish tower and the main grandstand, and raised the facility to an internationally outstanding level. The regatta course, which had already hosted the Universiade in 1989, was renewed with 12 million euros of state funding and 18 million euros of municipal funds. Barrier-free access and sustainability were considered throughout.



LOHRHEIDESTADION: Ahead of the Games, the stadium was comprehensively refurbished and expanded. Thanks to the new photovoltaic installations, it is largely energy-autonomous, and thanks to rainwater use and geothermal energy it is designed to be resource-efficient. The modernisation works covered all areas, from the grandstands and the synthetic track to the complete roofing, and today offer a high level of user comfort. On 11 July 2025 the stadium was ceremoniously reopened and has since been the only stadium in NRW capable of hosting German open-air athletics championships. It should be noted, however, that the new artificial turf pitch entails negative environmental impacts overall, although it is socially positive because it can be used all year round. The total project volume for the redevelopment and surrounding area was 51.5 million euros, including a state subsidy of 30.9 million euros.

LOW-EMISSION MOBILITY SOLUTIONS

KEYFACTS

- **63% of on-site trips by low-emission modes of transport**
- **Free and expanded public-transport offerings for event ticket holders and accredited persons**
- **Awareness measures (including an individual CO2 footprint calculator)**
- **Mobility accounted for 60% of total emissions.**

At international major sporting events, the largest share of the carbon footprint typically comes from mobility and new construction, making these sectors central fields of action. Since new construction was avoided entirely in the context of the Rhine-Ruhr 2025 FISU World University Games, the Organising Committee focused its strategy, among other things, on the design of low-emission mobility solutions. The arrival and departure of participants and spectators from distant regions can only be steered ecologically to a limited extent with the means of transport currently in use. The situation is different within and between the host cities. In the sense of keeping distances short, existing infrastructure in the Rhine-Ruhr area and in Berlin was consistently used. During the event days, low-emission modes such as train and bus — which cause significantly lower greenhouse-gas emissions per person than other modes of transport — were preferred.[10]

Micromobility (e.g. by bicycle) also plays a central role in low-emission mobility solutions. For this, existing local infrastructure was drawn upon. The conversion of former rail lines into cycle paths has created attractive connections between Ruhr cities and green landscapes (see the Radschnellweg Europa (RS1) at radrevier.ruhr). On the occasion of the cross-regional transport issues surrounding the FISU World University Games, the working group »Task Force Moving« was established. It consisted of representatives of all transport companies involved in the Games and of the municipalities concerned. Together, transport concepts were developed and reviewed.

The following objectives and measures illustrate the focus of this area and indicate the contribution to relevant SDGs.

OBJECTIVES

- **Focus on low-emission means of transportation on site**
- **Reduction of individual shuttles**
- **Promote low-emission arrival and departure options**

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

Raising awareness for environmentally friendly mobility and climate protection

To promote climate-friendly mobility decisions, the Rhine-Ruhr 2025 OC deliberately focused on awareness-raising, information and transparency along the entire travel chain. Information on sustainable arrival and departure options was systematically integrated into the venue guides so that participants and spectators could see low-emission mobility options early on and use them more easily.

In addition, a digital »footprint calculator« was embedded in the ticket-purchase process. This tool allowed ticket buyers to calculate the individual carbon footprint of their event visit, compare different modes of transport and, optionally, make a personal climate-protection contribution. However, the offer was taken up by only a small share of ticket buyers. For future events, a stronger and more targeted communication of such tools — or the development of alternative, low-threshold awareness approaches — is therefore recommended. The topic of climate protection was additionally addressed in educational and interactive formats as part of the Discover Route (see p. 117–118).

Transport and hotel concept based on the principle of short distances

The construction of a student-athletes village was deliberately avoided; instead, **decentralised accommodation** in existing infrastructure was realised. For this purpose, the organisers cooperated with a total of 64 hotels. The aim was to accommodate participants as close as possible to their respective venues, so that training and competition venues were often reachable on foot. In addition, a bus shuttle service for delegations and an on-demand shuttle service for officials were set up in order to secure transport within and between the host cities.

Free and expanded public transport

For all persons with an official event ticket and for almost all accredited persons, a free public-transport ticket was produced in cooperation with the Verkehrsverbund Rhein-Ruhr (VRR) and the Berliner Verkehrsbetriebe (BVG). This allowed spectators, volunteers and participants to use local public transport in the Ruhr area and in Berlin **free of charge**. To cover increased mobility demand and to make the public transport offer more attractive for spectators, service frequency was adjusted by deploying additional vehicles — among other things during the Opening Ceremony at the Schauinsland-Reisen-Arena in Duisburg.

Partnerships with (micro-) mobility providers

To provide low-emission and incentivised micromobility solutions on-site, discussions were held with local providers. This led to a successful cooperation with the company Lime, which set up and managed more than **20 additional e-scooter stations** in the host cities. Depending on location and event days, this offer was taken up to varying degrees.

Cycling rewards

As an incentive and a form of recognition for spectators who used the bicycle as an emission-free means of transport, a **free bicycle-washing station** was offered at the Ruhr Games Festival in Bochum and at the Beach Festival in Sportpark Duisburg. The offer was very well received. In total, around 300 bicycles were cleaned.

Bicycle parking facilities were shown digitally on the venue maps. Additional signposting of the cycling infrastructure beyond the existing municipal signage could not be implemented due to limited time and personnel resources.





EXCURSUS: ACTIVE CYCLING MOBILITY AT THE RHINE-RUHR 2025 FISU WORLD UNIVERSITY GAMES

Implications for sustainable transport strategies of a possible Olympic bid in NRW

The Master's thesis by Laura Stahl (M.Sc., Hochschule Bremen, Interdisciplinary Sustainability Management) examines sustainable mobility with a focus on cycling as a form of micromobility. The analysis is based on structured on-site observations carried out during the Rhine-Ruhr 2025 FISU World University Games at selected venues that are also included in NRW's Olympic bid. A standardised observation form was used for each sports venue and captured aspects of access, cycling and pedestrian infrastructure, signage and the use of active modes of mobility. The data collection was supplemented by photographs, app screenshots (e.g. MetropolRadRuhr) and short notes. In addition, users of sustainable mobility were surveyed at the selected venues.

The results available at the time of drafting the report show that cycling was indeed used in a functional way but was not strategically integrated into the event concept. Use was largely based on existing infrastructure and individual routines; targeted communication by the organisers, temporary measures or an overarching cycling strategy were missing. The observations also make clear a strong dependence on local framework conditions and established mobility cultures. In the subsequent qualitative interview phase, the topics of governance structures, infrastructural integration, communicative visibility and transferability to future major events will be explored further in order to place the findings in context, identify room for manoeuvre and derive concrete implications for the further development of sustainable mobility strategies.

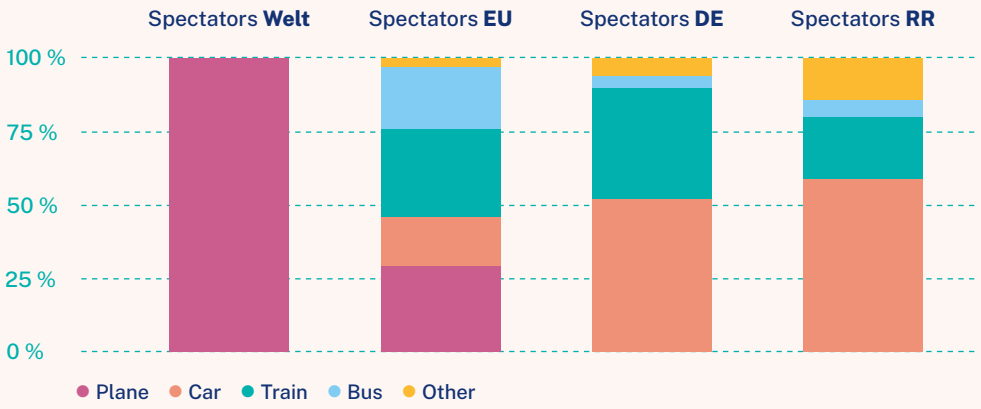
Sustainability is a joint effort: The bicycle is an environmentally friendly and activity-promoting mode of transport, and particularly practical in urban regions. As an organisation or as an individual, everyone can take part in the annual »Stadtradeln« (City Cycling). The OC took part with its staff in 2024 and 2025 and additionally supported the »Radeln für Menschenrechte« (Cycling for Human Rights) in June 2025.

Modal split of transport modes used by spectators

Arrival and departure

The distribution of passenger transport across different modes (modal split) for arrival and departure to the Games shows differences by region of origin (see Annex Methodology D). While spectators from outside Europe always used aeroplanes due to the long distances involved, a more differentiated picture emerged for the European and national groups. Around 30% of spectators from EU countries travelled by train, 21% by bus and 29% by plane. Among German guests, car use dominated with 52%, followed by train travel at 38%. In the regional context (spectators from the Rhine-Ruhr area), the car was chosen most frequently at almost 59%, followed by train (21.5%) and bus (5.8%).

These results show that low-emission modes of transport were indeed used where feasible.

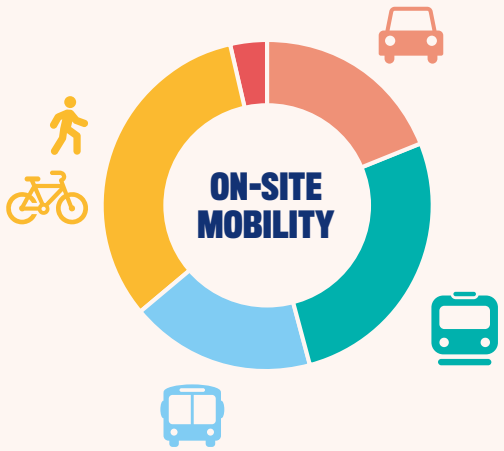


Spectators World = all non-European spectators, Spectators EUR = European spectators other than Germany, Spectators GER = German spectators other than Rhine-Ruhr, Spectators RR = Rhine-Ruhr residents (by place of residence)

Mobility on-site

The analysis of the transport modes used on-site shows that during the event days the majority of trips were made by low-emission or non-motorised means (see Annex Methodology D). With a share of 32.5%, most trips were made on foot or by bicycle. This is due in particular to the short distances between the venues and to their good accessibility within the Rhine-Ruhr metropolitan region. Offers of micromobility such as e-scooters played only a minor role overall at 3.5% but proved to be a useful additional mobility option for short inner-city distances. Rail transport played a central role for intra-regional mobility with a share of 27%. Bus transport contributed 18%, in particular by connecting the venues and reducing individual car journeys. Car use at 19% was below the national average and points to an overall environmentally conscious mobility behaviour.

Overall, the modal split shows that the interplay between a decentralised yet compact event concept, existing infrastructure and targeted incentives (such as the free public-transport ticket) contributed to reducing traffic-related emissions on-site.



CAR: 19 %
TRAIN: 27 %
BUS: 18 %
BIKE/FOOT: 32,5 %
SCOOTER: 3,5 %

Efficient shuttle-fleet concept

A central element of the transport concept was the provision of a safe, reliable and free transport system for all accredited participant groups. The shuttle fleet served student-athletes, delegation officials, technical officials and members of the FISU Family (functionaries and staff), including luggage and sports equipment, as well as other accredited groups such as media, organisational staff, service providers, volunteers, VIPs, sponsors and marketing partners. This gave rise to a complex transport network linking competition, training and event venues, official hotels and key logistical points such as airports, railway stations, media centres and ceremony sites.

The fleet planning was based on a detailed needs assessment by user group, schedule and group size, taking existing traffic infrastructure into account. The focus was on optimised route planning, minimisation of empty kilometres and adaptation to existing traffic flows, in particular during peak hours.

To ensure smooth operations, a comprehensive venue transportation management was developed that regulated stopping points, loading and parking zones and space requirements. This was complemented by a Vehicle Access and Parking Permit (VAPP) system for steering access authorisations. A digital fleet-management system supported operational steering, tracking and documentation of the shuttle fleet.

Share of the mobility sector in the event carbon footprint

Overall, the mobility sector caused 44,346.42 tonnes of CO2 and thus around 60.4% of total emissions. By far the largest share was attributable to the arrival and departure of participants at 43,417.87 tonnes of CO2 (59.1%). This illustrates the international reach of the event and at the same time shows that the bulk of the climate impact arises outside the actual event operations.

The footprint of local transport operations, at 928.55 tonnes of CO2 (1.3%), was comparatively low. This is attributable to the decentralised event concept, the use of existing transport infrastructure and the free use of public transport for accredited groups and guests. Nevertheless, mobility remains the dominant driver of the event carbon footprint and thus the central starting point for future climate-protection measures at international major sporting events.

In the area of transport, the OC itself was responsible for only 2.1% of emissions and thus had a negligible impact compared with the largely unavoidable emissions of arrival and departure.

RENEWABLE ENERGY SOURCES

KEYFACTS

- **100% green electricity for the OC headquarters**
- **50% green electricity for the event venues**

In addition to fundamentally energy-saving planning, this third field of action focuses on the integration of renewable energies to provide redundant electricity supply for sports and event venues. Because existing venues were used, however, the organiser's direct scope for influence was limited.

On a positive note, a photovoltaic installation is already in place on the roof of Messe Essen, and corresponding systems were also installed during the modernisation of the Lohrheidestadion.

The following objectives and measures give substance to this focus area and identify the ecological impact and the corresponding SDG.

OBJCTIVES

- **Purchase of electricity from renewable energy sources**
- **Promote innovations for renewable energies**

With this focus area, Rhine-Ruhr 2025 contributes to the SDG:



Measures and impact analysis

Venue Power Check

In preparation for the Games, the electricity providers of all event venues in the Host Cities were reviewed. Where the supply situation was not satisfactory, discussions were sought with operators to inform them about sourcing green electricity and its advantages. During the event period, more than 50 % of the venues (12 of 23) were fully supplied with green electricity, which roughly corresponds to the current level of deployment in Germany. Further venues used a mix of fossil and green electricity.

Green electricity for the headquarters

In September 2023 the electricity provider for the OC headquarters in Düsseldorf was changed so that it was supplied with 100% green electricity.

Share of the energy sector in the event carbon footprint

The energy sector contributed only to a very small extent to the overall carbon footprint of the Rhine-Ruhr 2025 FISU World University Games. On the basis of a conservative calculation of 97.04 tonnes of CO2 — equivalent to 0.09% of total emissions — it becomes clear that energy consumption during the event period played a subordinate role in the overall balance.

At the time of drafting this report, no complete, verified data on the energy consumption of the individual Sports and event venues were available. For a nevertheless robust estimate of the event carbon footprint, First Climate modelled energy consumption on the basis of an average German electricity mix, the size of the sports venues, the usage scenarios through the Games and the number of event days.

For future events it is recommended that specific energy data be collected earlier and more systematically so that the contribution of this sector can be quantified more precisely and targeted savings potentials can be derived.

Sustainability is a joint effor: Just as the Organising Committee switched to a green electricity provider, everyone can review their own situation — both privately and in sports clubs — and, if appropriate, initiate a switch to renewable energy sources.

♻ RESOURCE-FRIENDLY PROCUREMENT AND WASTE MANAGEMENT

KEYFACTS

- **Digital communication solutions**
- **Reuse of sports and event equipment via the Restlos auction platform**
- **Recycling of venue dressing material (82%)**
- **66% of total procurement volume covered by rental solutions**
- **Merchandising material produced from recycled materials (32%)**

The model of the circular economy, design approaches such as »Cradle to Cradle« and the associated resource conservation are central components of current sustainability debates, as they point to both ecological advantages and potentials for regenerative practices. In practice, however, implementation remains challenging, as the European circular-economy rates illustrate: in 2023, the share of circular materials in Europe stood at 11.8 %, while less than 10 % of the materials used came from recycling.[12] In an event context with multiple venues and a large number of stakeholders, additional challenges arise — which the OC actively addressed and, in some areas, was able to make progress on.

Within this focus area, the emphasis was on resource-efficient and responsible procurement as well as on the further use or return of sports equipment and other event-specific materials to the material cycle. Catering was also included as a particularly resource-relevant area.

The focus area also followed the Zero Waste principle according to the five R's (Refuse, Reduce, Reuse, Recycle, Rot) with the aim of minimising resource consumption and waste volumes as well as achieving high reuse and recycling rates. Accordingly, procurement decisions went beyond pure price comparisons and, in particular, took the following criteria into account:

- Which materials and products can be avoided, and what is actually necessary?
- Which needs can be covered by rental solutions?
- Where and under what conditions is production carried out, how are supply chains designed, and which materials are used?
- Are relevant certifications available?
- Can packaging be avoided or at least reduced?
- Which products are suitable for reuse, upcycling or recycling?
- Are reusable systems as well as compostable, recyclable or closed-loop alternatives available?

OBJECTIVES

› Considering resource-friendly and plastic-free alternatives in procurement and catering

› Total amount of waste as low as possible and as little littering as possible

› Highest possible rental, reuse and recycling rates

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

Sustainability guidelines for procurement

Internal guidelines were integrated into the procurement documents and explained in an accompanying workshop. Among other things, they covered the principles of »renting before buying«, the use of second-hand products, the reduction of packaging and the systematic assessment of material compositions and supply chains. Depending on the type of procurement, specific sustainability criteria were added and taken into account — for example in the design of the Wanda mascot costume, the uniforms and the venue dressing. In addition, the competence centre for sustainable procurement of the Federal Ministry of the Interior was consulted.

The rapid growth of the OC proved to be a challenge: a workshop at the beginning of the planning phase reached only part of the team, while in the immediate run-up to the event there was limited time for further training. For future events it is therefore recommended to establish more binding mechanisms and standards in order to embed sustainability aspects in procurement more systematically and consistently.

Use of digital solutions and recycled paper

During the event days, wherever possible, digital communication solutions were used. These included **e-tickets** and an event app which provided information such as the daily programme, news items and venue guides digitally. Printed communication materials such as programme booklets or site plans were deliberately kept to a minimum to reduce paper consumption and the associated resource expenditure. This approach was also actively communicated to partners, with a clear recommendation that they too should keep their own printed materials to a minimum or avoid them entirely.

In addition, NFC technologies (Near Field Communication) were used at the venues: via NFC touchpoints spectators could access location-specific information wirelessly using their smartphones, thereby meaningfully supplementing physical information points.

In the OC headquarters, certified recycled paper was used predominantly. Because of the large number of temporary offices at sports and event venues, however, it was not possible to systematically verify the consistent use of recycled paper during the event days.

Resource-efficient concepts for various materials and products

These measures covered uniforms, promotional items, venue dressing and equipment, promo and merchandise articles, accreditation elements and decorations. Some concepts are still in detailed planning. The following overview gives an as transparent as possible summary of selected materials:

MATERIAL / PRODUCT	ACTION
Outfits 	**Staff T-shirts:** At the start of the project phase, printed T-shirts made of certified organic cotton were procured. The manufacturer **Stanley/Stella** is a member of the Fair Wear Foundation. **Promo outfit:** Additional uniform items for public appearances and promotion were sourced from **Promo-Dis**, based in Berlin. The company states that it follows well-founded and responsible sourcing practices. **Uniforms:** As a premium partner of the Games, Macron supplied the official uniforms. The following certifications were in place for the products: • ECO fabrics made of 100% recycled PET (Global Recycled Standard, GRS) • FSC-certified packaging and recycled poly bags with QR codes for disposal • ISO 14001, GRS, FSC, BCI for durable materials and audited supply chains • BREEAM certifications: offices (EXCELLENT, 70.9 points), warehouses (VERY GOOD, 65 points) *The official »Uniforms Wear & Care Guide« also explicitly pointed out that the uniforms could be returned after the Games so that, together with remaining stock, they could be donated to the **Diakoniewerk Essen** and to the **Global Aid Network** (GAiN).*
Accreditation passes 	For participants with day accreditations, day passes made of seed paper with a compostable hologram were used. After the event these could be planted and served as a vivid example of zero-waste event design. For multi-day accreditations, robust hard plastic cards were used that withstood more intensive wear. Many participants additionally kept their accreditation as a keepsake.

MATERIAL / PRODUCT	ACTION
Promotional items and gifts 	Care was taken to use predominantly everyday-usable products, including cotton bags (some Fairtrade-certified), umbrellas, water bottles, socks and power banks. For future events, it is recommended that the principle of »less is more« be applied more consistently. Early coordination of the needs of the individual focus areas, and the targeted implementation of joint procurement, represent a central lever for making both product selection and the underlying production processes more sustainable.
Merchandising articles 	For some of the articles, recycled materials as well as organic cotton were used. In addition, the online shop provided product-related information. For future events, it is recommended that this information — in particular regarding supply chains — be further expanded in order to increase transparency and information density. **For the Wanda merchandise articles** there was also a special link to peregrine falcon conservation in cooperation with **NABU NRW**, described in more detail on p. 74.
Venue ressing materials 	When furnishing the venues with banners, flags, signs and other design elements, the design was deliberately conceived for multiple use. After the Games, the materials were collected from the host cities in the Rhine-Ruhr metropolitan region, sorted and handed over to a nearby Fraunhofer institute. There they were fed into an innovative recycling process from which a so-called »Ecomasse« was produced. In cooperation with the initiative ACT2, the aim is to develop local infrastructure elements for the region from it, to be kept in use for the long term. Accompanying storytelling is also intended to convey the principle of the circular economy to a broader public. In addition, the Sport- und Bäderbetriebe der Stadt Essen took over a large share of the carpets used in Essen (around 10,000 to 12,000 square metres) for further use at a planned event in a three-court sports hall. Together with the adh, an upcycling initiative was also realised: former banner materials were turned into toiletry bags as individual keepsakes.



EXCURSUS: SUSTAINABILITY ASPECTS OF THE TEAM STUDI UNIFORMS

Source: Hochschulsport Marketing GmbH

For the uniforms of the Team Studi, the adh relies on responsible production standards and works together with its partner **Craft Sportswear**, which is part of the New Wave Group. In its sustainability strategy, the New Wave Group pursues concrete goals on climate protection and circularity, which are presented in detail in its sustainability report. The Team Studi clothing is **OEKO-TEX certified** and consists of **100% organic cotton** in the cotton share as well as **100% recycled PET**.

Sustainability is a joint effort: Both sustainable procurement and responsible consumer behaviour require the interaction of different actors. This includes, among other things, the use of reusable and second-hand products, the use of Fairtrade articles and environmentally friendly materials, as well as a stronger consideration of plant-based foods. Specifically for the sports sector, the initiative »Sport handelt Fair« provides practice-oriented guidelines and orientation aids.

Share of sustainable materials in procurement

In the area of procurement, the analysis focuses on merchandise products. When selecting the articles, particular emphasis was placed on material-related sustainability criteria, in particular with a view to resource conservation and the reduction of environmentally harmful substances.

A substantial share of the products (32.4%) was manufactured from recycled materials. The use of secondary raw materials not only reduces the need for primary resources but also contributes to lowering emissions and waste along the supply chain. A further 12% of the merchandise articles were manufactured from natural raw materials. Central principles of a sustainable circular economy were thereby supported.

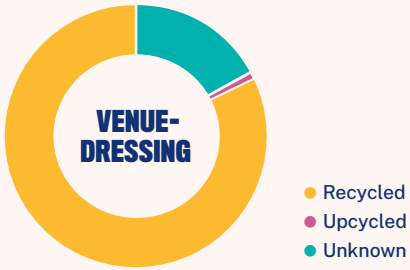
Across all product categories, the share of plastic-containing articles stood at 80%, of which 29% consisted of recycled plastics. This figure must, however, be viewed in a differentiated way, since a considerable share fell on products such as ballpoint pens, which were procured in large quantities but which have only a very small material volume per unit. Accordingly, the high share at product level does not equate to a high absolute plastic quantity.

Overall, the procurement strategy in the merchandising area shows that the integration of sustainable materials was a central component of product design, but that this should be pursued more consistently at future events. Beyond that, »quality before quantity« should apply, as well as »less is more«.

Reuse of sports and event equipment

A large share of the office equipment for the headquarters was taken over from the European Championships Munich 2022. Part of the sports equipment came from the Special Olympics World Games Berlin 2023 and was reused for the Rhine-Ruhr 2025 FISU World University Games. For further sports and event equipment that was not rented but purchased, the focus was on returning items to the material cycle. Reusable equipment was offered via the **Restlos auction platform** after the Games. The articles were sorted, bundled into lots and digitally auctioned in August 2025. Clubs and organisations as well as private individuals could take part in the auction. Sports equipment such as balls and mats was particularly sought after. Challenges arose in particular in the timely preparation of the items to be auctioned and in ensuring sufficient reach for the initiative. Small items (for example drinking bottles) and non-sellable office furniture from the headquarters and office equipment were additionally donated to schools, clubs and other organisations in the region.

REUSE RATE



Rental and reuse rates

Without reduction and reuse measures, venue dressing materials such as banners, flags and panels would account for a substantial share of the overall waste volume at major sporting events. Accordingly, particular attention was paid to achieving the highest possible reuse of these materials and the best possible return into suitable cycles.

Around 82% of the materials used in the host cities of the Rhine-Ruhr area were recycled after the Games as part of the ACT2 project. The aim is the production of new, fully recyclable products that remain in a closed material cycle. To this end, when exhibition copies of the Rhine-Ruhr 2025 torches were handed over to the host cities after the event, the branding material used was carefully reprocessed. The exhibits are presented on columns made of these materials and thus underline the sustainable approach of the measure. Approximately 17% of the venue dressing materials were used further in Berlin. The recycling and reuse processes there could, however, not yet be fully traced at the time of drafting the report. Less than 1% of the materials was used in an upcycling project for the adh, turning them into bags, or kept as keepsakes.

When procuring, the option of renting the required goods rather than purchasing them new was consistently examined. In total, more than 20 million euros were spent on rented goods, while expenditure on new purchases amounted to just over 10 million euros. This meant that rental solutions accounted for around 66% of the total procurement volume.

Sustainability is a joint effort: The Badmintonearth initiative shows in a practical way how the life cycle of equipment used in badminton can be extended and how materials can be reused and recycled. The initiative was founded by the athletes Miranda Wilson and Kai Schäfer, who advocate for more climate protection in badminton. Their recycling initiative was also implemented at the training and competition venue in Mülheim.

Sustainability guidelines for the catering of accredited persons

In the public catering areas, the work was primarily carried out with locally based gastronomy businesses, supplemented by food trucks and temporary catering structures. To prepare for the Games, specific sustainability guidelines for the catering area were developed, covering, among other things, reusable systems, refill stations, plant-based food and measures to avoid food waste.

- **Reusable instead of single-use**: In the large dining halls, such as at Messe Essen, high-quality reusable tableware was used predominantly in combination with refill drinks stations. Single-use products were kept to a minimum and limited to paper cups in tea and coffee lounges. Integrated dishwashing stations enabled efficient cleaning.

- **Plant-based (vegan) dishes:** Both for lunch and for dinner, purely plant-based menus and options were available. In total, purely plant-based dishes made up to 30% of the entire food offer. At Messe Essen they were additionally labelled with a CO2 label in order to make their lower emission values compared with animal-based products visible and to encourage more conscious consumption.

- **Local catering partners:** With 14 out of 15 caterers based regionally, transport distances could be kept to a minimum.

- **Food-sharing cooperation:** Surplus, untouched meals were collected by the catering partner Stolzenhoff and picked up daily by food savers for further use — which saved food from being thrown away. Despite internal support and appropriate organisational preparation, the willingness of external catering companies to cooperate witht foodsharing turned out to be a challenge. This limited involvement constrained the potential impact of the food-sharing cooperation supported by the Rhine-Ruhr 2025 FISU Games. It also remained unclear to what extent further catering partners contributed to avoiding food waste during the event. Future organisers could offer volunteers the possibility, in the evenings, to take perishable food home in their own containers for a small cost.



During the entire event, more than 78,000 lunches and dinners were served for delegations, and more than 120,000 meals for volunteers, staff and technical teams. In addition, 113,000 coffee breaks were organised.

Participants generally showed high acceptance of the reusable strategy, with feedback largely positive (Master's thesis by Clara Wübbeke, Johannes Gutenberg-Universität Mainz). Around two thirds of those surveyed (65%) considered both the return possibilities for reusable tableware and cups as sufficient and the organisation of the return processes as well structured. The reusable approach thus proved to be an efficient and user-friendly system that meets the requirements of sustainable event logistics. For future major sporting events, an expansion to the entire spectator catering is recommended in order to establish a consistently sustainable supply structure (see Annex Methodology E).

EXCURSUS: THE RHINE–RUHR 2025 FISU GAMES MEET SUSTAINABILITY RESEARCH
STUDY INSIGHTS FROM RUHR–UNIVERSITÄT BOCHUM

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Global food supply chains are responsible for around one third of human-induced greenhouse-gas emissions, which to a large extent can be attributed to the consumption of animal products. A stronger shift towards plant-based diets can therefore substantially reduce emissions from the food sector. Encouraging such dietary change has become a central topic of behavioural research in recent years. In particular, non-financial incentives such as information nudges (e.g. CO2 labels) have received great attention and show that transparent information can contribute to more sustainable dietary decisions. Nevertheless, the actual effect of such measures on consumption behaviour remains moderate overall. This raises the question of whether financial incentives could be a stronger instrument for behavioural change. Does the introduction of a discount on vegetarian dishes lead to a shift in consumption? Can this effect be enhanced when the financial incentive is combined with a moral appeal? And what happens when the incentive is withdrawn?

In cooperation with the Rhine-Ruhr 2025 coordinators, the research team carried out a field experiment on the Messe Essen exhibition grounds during the Rhine-Ruhr 2025 FISU World University Games to investigate how financial incentives influence food choice. Over a period of 10 days, more than 8,000 spectators received food vouchers that could be redeemed at two food stalls. The vouchers offered different price reductions for vegetarian dishes and, in some cases, included an additional sustainability message from Prof. Löschel. This design made it possible to analyse both the introduction and the withdrawal of such incentives.

Of the 8,000 vouchers distributed, 2,450 were redeemed. The results show that targeted price reductions for vegetarian dishes significantly increased demand for them, while removing these incentives led to a noticeable drop in vegetarian choices. The findings suggest that even small changes in the relative price between vegetarian and non-vegetarian dishes can considerably influence consumption behaviour, i.e. that they have a high price elasticity. Financial incentives can therefore effectively help to promote climate-friendly diets and complement other sustainability measures.

(Source references available on request from the author)

Outdoor drinking-water stations

At all venues with public outdoor areas in the Ruhr region, a total of **13 temporary drinking-water stations** were installed, where drinking bottles could be refilled free of charge. In addition to resource conservation, this measure also contributed to heat protection (see p. 82) and reflected the aspiration of treating access to free water as a human right. Overall, around 25% of spectators and participants used the offer; in doing so, approximately 13,500 litres of drinking water were drawn.

The visibility of the drinking-water stations, however, showed room for improvement: only just under 32% of respondents perceived the fountains on the event grounds as clearly visible and easily recognisable. For future events, a strengthened communication and signage strategy is therefore recommended to increase the use of such offers (see Annex Methodology E).

Thanks are due to the Stadtwerke Bochum and the Stadtwerke Essen, which provided fountains and water bars free of charge and looked after them. In addition, another water bar was operated in cooperation with a tip: tap e. V. in Sportpark Duisburg. Modern water bars from Water Is Right rounded off the offer. Through their use alone, the waste of around 16,000 plastic bottles could be avoided.



Anti-littering — actions against environmental pollution

On the occasion of **World Cleanup Day 2024**, the Rhine-Ruhr 2025 Cleanup Day was launched in cooperation with World Cleanup Day Germany. With the participation of Oliver Krischer, Minister for the Environment, Nature Conservation and Transport of the State of NRW, and around 40 OC staff, not only was a considerable amount of waste removed from the environment, but attention was also drawn to the problem of environmental pollution and a clear anti-littering signal was set.

During the Rhine-Ruhr 2025 Festival, pocket ashtrays were distributed in green spaces and in particular at concert evenings. The aim was to raise awareness that cigarette butts and small items of waste should not be thrown into the environment but disposed of properly in waste bins, in order to protect soil and water from pollution.



Needs-based waste separation and recycling

From the outset, needs-based waste-separation systems and cooperation with locally based waste-management companies had been planned. A uniform expansion of waste fractions and signage across all venues, however, could not be implemented due to limited resources. The existing separation systems and signage of the respective event venues were therefore largely retained. This was also reflected in the perceptions of spectators: only about one fifth of those surveyed (18.9%) stated that they had been actively informed about recycling and sustainability measures.

To ensure effective recycling, additional waste containers were provided depending on need and feasibility. It should be noted that the local waste-management companies differed in their approaches to waste recovery. Some, for instance, complement recycling processes with energy recovery and heat generation.

Around 32 % of the spectators perceived a smoothly functioning waste-separation system. Despite the limited signage, a positive influence of the event organisation on individual behaviour was evident: 36.6% of respondents felt motivated by the design and communication of the event organisation to take an active part in recycling (see Annex Methodology E).

Shares of the gastronomy sector and other consumption in the carbon footprint

Catering: Since no reliable data on the catering of spectators were available, a complete picture of this emission source was not possible. The calculation of the event carbon footprint in the catering area therefore exclusively reflects the catering organised by the OC for accredited persons. There, emissions amount to 105.76 tonnes of CO2, corresponding to 0.15% of the total carbon footprint. It is to be assumed that the actual share of emissions from the entire event-related catering was considerably higher, when the catering of spectators is also taken into account.

Goods: The analysis of the event carbon footprint shows that goods and services made a substantial contribution to the overall balance of the Rhine-Ruhr 2025 FISU World University Games. This area accounted for 9,620.23 tonnes of CO2 overall, representing 13% of the total carbon footprint. Both purchased and rented materials and equipment were taken into account. Purchased goods caused 6,106.78 tonnes of CO2 and thus accounted for 8.3% of the total carbon footprint. This includes in particular durable materials, sports equipment and consumable and event articles that were transferred into the stock of sports venues or could be used further after the Games. The overall attribution of the carbon footprint is therefore overstated, since it would have to be spread over the years of use. Emissions from rented goods amounted to 3,513.45 tonnes of CO2 (4.8% of total emissions). This included, among other things, generators temporarily provided for electricity supply, electronic devices, seating and other rentable event modules that secured operations during the Games. Despite the smaller share compared with purchased goods, the data show that rented materials, too, represent a relevant emissions factor, in particular because of upstream processes such as production, maintenance and transport along supply chains.

Waste: In comparison, the waste area contributed only very little to the carbon footprint. In total, 8,155.26 kilograms of waste were recorded, which arithmetically corresponds to a share of less than 0.1% of total emissions. This result can be attributed to several factors, including the extensive use of reusable and rental solutions, an established waste-management system at the event venues and a deliberately reduced procurement of materials in line with this sustainability strategy.

SPOTLIGHT: PEREGRINE FALCON CONSERVATION

The mascot of the Rhine-Ruhr 2025 FISU World University Games was **Wanda, a peregrine falcon**. It was accompanied by the official Wanda Protectors of the Naturschutzbund Deutschland, Landesverband Nordrhein-Westfalen e. V. (**NABU NRW**). Together, bridges were built between sport and central environmental topics such as climate protection, biodiversity and in particular species conservation..



Environmental facts about Wanda and her species:
In recent decades, the decline of bird populations in Germany — as well as the global biodiversity crisis — has been extremely worrying. But there are also encouraging developments: the peregrine falcon has become a symbol of successful species-protection efforts. The bird of prey, which had at times been close to extinction in North Rhine-Westphalia, was able to rebuild stable populations thanks to targeted protection programmes and the dedication of committed conservationists. The Rhine-Ruhr 2025 OC had the opportunity to experience this success directly and to take part in a ringing date for young peregrine falcons together with NABU NRW. The comeback of the peregrine falcon shows how effective consistent species-protection measures and long-term commitment can be in helping to safeguard endangered bird species for the long term.

Sustainability is a joint effort: To support the engagement of NABU NRW, a species-protection contribution of 2.5% was added to all sales of Wanda merchandise (e.g. T-shirts, plush toys, mugs). A total of 1,550 euros was generated in this way, benefiting NABU NRW and peregrine falcon projects in the Rhine-Ruhr metropolitan region.

4.2 SOCIAL SUSTAINABILITY AND HUMAN RIGHTS

Within the framework of the 2030 Agenda, the United Nations have explicitly anchored the importance of sport and mark each year the »International Day of Sport for Development and Peace«. In 2025, it was held under the motto »Levelling the Playing Field: Sport for Social Inclusion« — a theme that the Rhine-Ruhr 2025 FISU World University Games also took up.

Social sustainability in sport addresses societally relevant topics in and through sport. At the heart of the Rhine-Ruhr 2025 FISU Games — and grounded in the risk analysis — stood the respect for and active promotion of human rights as well as the use of the power and values of sport. The aim was in particular to create spaces for equal opportunity, diversity, inclusion and (mental) health, to make these values visible and to set wherever possible long-term impulses for change. Against this background, the Games concentrated on three social focus areas within the sustainability strategy:

- **Physical activity and health**
- **Diversity and inclusion**
- **Education and engagement**

The social lighthouse projects and programme elements are reported on in the following chapters. These include the »Young Sports Media Talents« programme for the promotion of the next generation in sports journalism, the »Rhine-Ruhr 2025 Sports Diploma« as an offer to encourage physical activity for young and old alike, the intercultural school and university project »Adopt a Delegation« and the »Discover Route«, which placed particular emphasis on the SDGs and education for sustainable development (ESD).

Also of central importance for the human rights work and for social sustainability was the **Safeguarding and Awareness Concept**, including its complaints mechanism, which will be presented later as a spotlight. Also part of social sustainability are sustainability communication in cooperation with the **ambassadors** Domitila Barros and Elisa Klinkenberg, which will be highlighted separately.

Human Rights

PHYSICAL ACTIVITY AND HEALTH

KEYFACTS

- **Involving local clubs and actors is relevant and worthwhile**
- **Participation formats are well received and allow people to experience sport firsthand**
- **Positive influence towards a healthier lifestyle through the various offers**
- **Healthy, plant-based catering should be further expanded and offered at a slightly lower price than conventional animal-based products. Furthermore, organic and locally produced catering offers should be given priority.**

According to the WHO status report (2024),[13] physical inactivity is widespread in particular in high-income countries. The pronounced lack of physical activity among adolescents is particularly worrying.[14] At the same time, mental illness is tending to increase in Germany. Young people, women and people from socially disadvantaged families are especially affected.

Encouraging an active lifestyle and regular physical activity is therefore a central lever for strengthening both physical and mental health and is also a goal of the Federal Ministry of the Interior's National Strategy for Major Sporting Events. Alongside sporting competitions and the role-model function of student-athletes, targeted participation formats at the Games were intended to awaken enthusiasm for movement, play and sport and, in particular, to promote club-based sport. The offer was aimed at all age groups, with a particular focus on children and adolescents, in order to sustainably raise awareness of physical and mental health. The Sports Areas and Kids Space zones of the festival programme were designed in cooperation with sports and health institutions for this purpose.

The strong interest of spectators at the Rhine-Ruhr 2025 FISU World University Games underlines the relevance of this approach: 93% of respondents stated that they were interested in health-promoting offers. The health-related measures were thus perceived as targeted and effective (see Annex Methodology F).

OBJECTIVES

› Creating enthusiasm for movement, sports and health

› Promotion of grassroots sport in the Rhine-Ruhr metropolitan region and throughout Germany

› Active participation and involvement of university sports, sports federations, initiatives and club

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

General documentation of the physical activity programmes and participation formats

Die Bewegungsangebote der FISU World University Games 2025 wurden im Rahmen einer quanThe physical activity offerings of the FISU World University Games 2025 were analysed as part of a quantitative study (Master's thesis by Sebastian Malburg, Johannes Gutenberg-Universität Mainz). Overall, they were perceived positively by spectators. More than half of those surveyed (54.5%) made use of at least one offer, with 26.9% only becoming aware of the formats on-site. Participation was predominantly shaped by emotional and social motives. Explicitly health-related reasons played a subordinate role at 4.7%. Despite the high interest, the results suggest that communication and visibility of the offers beforehand were only effective to a limited extent and that there is scope for optimisation at future major sporting events.

The offers achieved overall high satisfaction levels, pointing to a strong quality of experience. In particular, low-threshold formats that could be experienced together proved to be effective. Factors that facilitated participation were above all the fact that the offers were free of charge (18.2%) and the low barrier to entry (18.1%). Time pressure was named as the largest barrier (23%), although more than half of respondents (51.3%) reported no barriers at all. Overall, the measures made a substantial contribution to promoting physical activity and sport participation (see Annex Methodology G).

Against this background, beyond the immediate take-up of the offers, their effect on the physical activity and health behaviour of spectators beyond the event period is of particular importance. The results were extended by an additional quantitative survey (Master's thesis by Anthony Walter, Johannes Gutenberg-Universität Mainz). Overall, a positive effect of the activity- and health-promoting measures can be seen: 36.9% of respondents stated that they had been positively influenced by the offers and intended to aim for a healthier lifestyle in the future. This result underlines the lasting effect of the initiatives beyond the event itself (see Annex Methodology F) and can therefore also be seen as a Legacy.

Rhine-Ruhr 2025 Sports Diploma

At various stations of the Rhine-Ruhr 2025 festival programme, spectators could not only get to know the sports of the Games but actively try them out. Together with **21 partner organisations** — including sports federations, local clubs, volunteers and the Sports Diploma partner Westenergie as official supporter of the Games — a diverse sporting participation programme was realised.

At the **Park Festival Essen**, there were Sports Diploma stations for Badminton, Basketball, Archery, Fencing, Judo, Athletics, Swimming, Taekwondo, Tennis, Table tennis and Gymnastics. At the **Beach Festival Duisburg**, Rowing, Water polo and (Beach) Volleyball could be tried out.

The focus was on skill and curiosity: the offer was intended to generate enthusiasm playfully for different sports and for an active lifestyle. Anyone who took part at several stations collected stamps and received the Sports Diploma in the form of a certificate and a goodie bag as recognition.



Youth tournaments, battles, championships and further sporting participation formats

3x3 youth federation tournaments — Ruhr Games: As part of the Ruhr Games, exciting 3x3 Basketball youth tournaments were held, at which young talents from NRW and all over Germany showed their skills. The 3x3 Girls Day with tournaments for the U13 and U15 girls, as well as open participation activities, was as enthusiastically received as the federation tournament of the U17 state selections from several federal states. The U13M and U15M also competed for a place in the big Ruhr Games tournament, for which the top teams of the NRW 3x3 Tour had qualified. The Ruhr Games thus offered a strong showcase for up-and-coming 3x3 Basketball talent.

Urban Dance Battles and workshops — Ruhr Games: The Urban Dance Battles offered an open participation opportunity for those interested in dance of all ages and levels of experience, with formats such as 1vs1 Rookie, 3vs3 Crew Hip-Hop and 5vs5 Allstyle Battles. An international jury and renowned DJs ensured a professional setting. In addition, free workshops by international coaches invited participants to join in and learn.

German Freestyle Calisthenics Championship — Ruhr Games: For the first time, the Open German Championship in Freestyle Calisthenics was held outdoors on the container stage in Bochum as part of the Ruhr Games. 35 of the best athletes in Germany competed in the categories of Strength, Skills and Combinations. Technique, creativity and expression made the competition a highlight for all Calisthenics fans. In parallel, workshops, challenges and open bars offered the opportunity to become active oneself.

In addition, further trend sports such as **skating and teqball** could be tried out at the Ruhr Games Festival as well as at further locations in Essen and Duisburg.

Ambassadors programme — Rising Stars

Through the ambassadors programme, young up-and-coming athletes from the national teams were recruited as »Rising Stars« for Team Rhine-Ruhr 2025. In each of the 18 sports, one student-athlete acted as an identification figure for the Rhine-Ruhr 2025 FISU World University Games. The ambassadors were themselves students under the age of 25, in some cases with regional ties through place of residence or club affiliation, and thus represented the participants' life world in a particularly authentic way. Through their appearances, media presence and active involvement in the run-up to the Games, they carried the energy and spirit of the event to the outside world. This gave the event greater reach, and the Rising Stars themselves also benefited from increased visibility while serving as credible role models for the next generation of sporting talent.



Promotion of the FISU Healthy Campus Programme

The worldwide FISU »**Healthy Campus**« programme gained wider recognition in Germany through the Rhine-Ruhr 2025 FISU World University Games. The label supports universities in systematically developing their health management and actively contributing to the well-being of students and university members. In cooperation with the adh, nine German universities were able to join the certification programme free of charge and will continue to develop it after the Games (Legacy).

Following an information and motivation campaign, the participating universities registered on the FISU Healthy Campus platform in July 2024. After the one-year certification process, the results were made visible during the event days. The ceremonial presentation of the Healthy Campus Label took place as part of the Opening Ceremony of the **Rhine-Ruhr 2025 FISU World Conference** (further details see p. 108–109 & p. 116). Additional information on the participating universities is available at adh.de. Enquiries can be directed to gesundheit@adh.de.

Heat and sun protection

The drinking-water stations set up in particularly sunny and hot outdoor areas ensured free access to drinking water for everyone on the summer event days.

In addition, an awareness programme on the prevention of skin cancer and on further sun- and heat-related health risks was offered in cooperation with the **Stiftung Deutsche Krebshilfe** at the Beach Festival in Sportpark Duisburg. A free sunscreen dispenser was also available on site. In addition, sunscreen was provided in the Safer Spaces (see for more information on Safer Spaces p. 98–99). In the official merchandising shops, hats could also be purchased; the official Rhine-Ruhr 2025 uniform also included a unisex cap.

Sustainability is a joint effort: The initiative ›Bewegt studieren – Studieren bewegt!‹ demonstrates as a good practice how health promotion through sport can be implemented.

Exhibition: Gefühlssache

The »Gefühlssache« experiential exhibition, initiated by **GedankenKraftWerk**, conveyed knowledge on self-help and strengthened mental health preventively through interactive installations. Spectators were given the opportunity to experience mental strength, reduce inhibitions and gain new perspectives on their own mental health. The exhibition could be experienced in the East Foyer of Messe Essen throughout the entire 12-day event period of the Games.



Healthy catering offers

For the catering in the spectator area, a varied and balanced food offer was set as a guiding principle. The aim was to expand the offer to include healthier, fair-traded and more sustainable food and beverage options. In practice, however, a mixed picture emerged: vegetarian and vegan dishes, and occasionally food from organic production, were offered, yet conventional options nevertheless dominated.

The perception of spectators also supported this assessment: around 40% of respondents rated the catering offer positively with regard to healthy nutrition. For future major sporting events, it therefore appears advisable to further expand the share of health-promoting and sustainable dishes and to strengthen their visibility within the overall offer in a targeted way (see Annex Methodology F). This is also made clear by the further study which showed that vegetarian dishes were purchased much more frequently with small price discounts (excursus p. 70).

SPOTLIGHT: EFFECTS ON LOCAL SPORTS CLUBS

The FISU World University Games 2025 were perceived very differently by the local sports club representatives surveyed. The basis for this assessment was qualitative interviews with those responsible at the clubs (Master's thesis by Niels Richter, Johannes Gutenberg-Universität Mainz). The results show that a major sporting event of this kind has great potential to set positive impulses for local clubs, in particular if direct involvement takes place. Several respondents reported a special atmosphere during the Games. The international character and the encounter of young people from all over the world created a noticeably positive mood in the host cities and in the region. Individual interview partners visited competitions themselves and described them as interesting, high quality and enriching for the sporting offer on site.

The experiences of the clubs that were actively involved in delivering the Rhine-Ruhr 2025 FISU World University Games were rated particularly positively. They benefited not only organisationally but also structurally. In the course of the event, there were investments in sports facilities — through refurbishments, improvements in barrier-free access or the renewal of equipment. These measures have a long-term effect and sustainably strengthen the clubs, as the facilities continue to be used after the Games and in future allow the hosting of larger tournaments (Legacy). One interviewed club representative emphasised: »We can now use the new facility for years to come — that is real sustainability.«

Positive effects also emerged within club life itself. In some cases, club members received reduced tickets for competitions, in particular on the final days. As a result, members of different departments visited the events together, which promoted exchange within the club and strengthened the sense of community.

With regard to member development, the data analysis showed that the membership numbers of the surveyed clubs rose on average by 3.6% between 1 July 2025 and 1 October 2025. This corresponded on average to a gain of 99 members per club (see Annex Methodology H). Although this change is not statistically significant and cannot be attributed exclusively to the Rhine-Ruhr 2025 FISU Games, the figures at least indicate that such an event in principle has potential to support member recruitment for local sports clubs.

The interviews showed that early and close cooperation between organisers and local clubs was particularly effective. Where direct involvement took place, the Rhine-Ruhr 2025 FISU Games were perceived as a clear added value. At the same time, there is development potential to reach even more clubs in future.

Overall, the results demonstrate that major sporting events such as the Rhine-Ruhr 2025 FISU World University Games can set important positive impulses for local sports clubs — through international visibility, investments in sports infrastructure and the strengthening of a sense of community. With expanded cooperation with local clubs, these effects could be reinforced further in the future.

DIVERSITY AND INCLUSION

KEYFACTS

- **First-time integration of a Para Sport discipline into the competition programme**
- **Practical examples for the structural anchoring of inclusion at future Games**
- **Integration of the Safeguarding and Awareness Concept into the official Volunteer Training**
- **Intercultural exchange between people helps to dismantle prejudice**

With the slogan »Everybody is all-in!«, the Rhine-Ruhr 2025 FISU World University Games placed diversity at the heart of the Games and at the same time actively invited all people to become part of the international sports festival. Participants and volunteers from around the world, as well as spectators and all other stakeholders, found diverse spaces for intercultural exchange and shared experience.

With particular attention to people with disabilities, the event was planned and implemented to be as low-barrier as possible — from communication and day-to-day office life through to preparation and implementation. The inclusion work followed the guiding principle of identifying, removing and overcoming barriers at an early stage.

At the same time, inclusion and diversity were understood as continuous processes. Against the background of existing forms of discrimination such as structural racism and ableism, implementation represented a particular challenge. The event format was able to set impulses and create spaces, but it did not replace the ongoing engagement (in sport) with societal power relations.

Central foundations for practical implementation were established already during the preparation phase: from September 2023 onwards, the OC was supported by an Event Inclusion Manager (EVI) (more information: inklusion.dosb.de). In addition, the LOCs were asked to appoint their own inclusion officers in order to address the topic jointly at municipal level as well. A further emphasis lay on the involvement of human rights and awareness experts who accompanied the conceptual design.

Integrated event concepts — including a comprehensive safety concept, clear working conditions and transparent accreditation procedures — provided additional foundations for safeguarding human rights and for establishing discrimination-sensitive structures. Complementing this, a specific »Safeguarding and Awareness Concept« for the Games was developed (see p. 98–101). Building on this, the measures sketched out below contributed to the practical implementation of the objectives and, in particular, advanced SDGs 5, 10 and 16.

OBJECTIVES

- **Create participation and event experience for as many people as possible**
- **Promotion of safer spaces during the event days and a non-discriminatory culture**
- **Involvement of various stakeholder groups with regard to diversity and inclusion**
- **Promoting inclusion in sport and within the university sports organisation**

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

Para Sport discipline in the competition programme and medal table for the first time

For the first time in the history of the FISU World University Games Summer, Para Sport was integrated into the competition programme: **3x3 Wheelchair basketball** celebrated its premiere in July 2025. Seven men's and four women's teams competed on four competition days at the Jahrhunderthalle in Bochum in front of sold-out stands for the medals, which were included in the official medal table.



Charta der Vielfalt (Diversity Charter)

In September 2023 the OC signed the Charta der Vielfalt and thereby emphasised that it was committed to a safe, diverse, appreciative and prejudice-free working environment.

charta der vielfalt UNTERZEICHNET

What is the German Diversity Day (DDT)?

A nationwide day of action that has been initiated annually since 2012 by Charta der Vielfalt e. V., with the aim of making diversity in the working world visible and strengthening awareness of diversity and inclusion.

RECAP DDT: 28 May 2024
OC staff organised a joint lunch under the motto »Eat the World«. This was followed by a digital, interactive diversity training with two invited experts, which was intended to strengthen awareness of equality, justice and inclusion.

RECAP DDT: 27 May 2025
In addition to a repeat of the »Eat the World« lunch, the Rhine-Ruhr 2025 OC took part in the DDT of Universität Duisburg-Essen with a presentation and a »try-out« in 3x3 Wheelchair basketball as well as further sporting stations, which sensitised participants on campus to the perspective of people with disabilities.

Tandem Volunteer Programme

The programme invited people with and without disabilities to become part of the Rhine-Ruhr 2025 team. As already with the Special Olympics Berlin 2023, a tandem option was available for people with disabilities in selected volunteer areas. This created encounters and shared experiences for people with and without disabilities. The registration form was also available in plain language. In total, 22 tandem volunteers supported the Games.

Inclusion Volunteers

Among the volunteers who supported spectators, the »Inclusion Volunteers« took on the task of accompanying people with disabilities at the venues as needed. They were prepared for their deployment in advance by a special digital »Inclusion Training«, in which questions could also be clarified directly.

Affordable tickets and discounts

Ticket sales for the sporting and cultural events in the six host cities began in September 2024 and followed a low-price strategy in order to ensure broad social participation. In addition to moderate entry prices, targeted discounts were introduced for families, students, seniors and people with disabilities. The participating municipalities received free tickets (more than 1,000 tickets per municipality), which they could distribute independently, for example to schools or clubs. In addition, selected disciplines — including the Marathon and Race Walk in Bochum as well as selected preliminary-round matches, for example in Beach volleyball at Sportpark Duisburg — were open free of charge in order to attract as many people as possible to the event.

A day ticket for adults cost 13 euros, reduced 11.05 euros, for adolescents 9.20 euros and for children 6.50 euros. The discounts followed the percentage pattern of well-established family-friendly offers and were intended in particular to facilitate group visits. Overall, the prices were significantly below the level of comparable sports events (see figure): at the sports events used for comparison, a standard ticket was on average 69% more expensive than at the Rhine-Ruhr 2025 FISU World University Games.

TICKET CATEGORIES

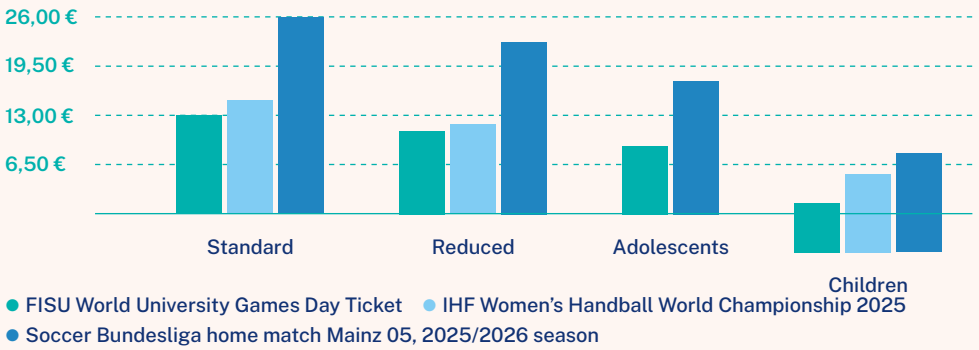
CATEGORY	FULL PRICE	REDUCED	ADOLESCENTS	CHILDREN	FAMILY
GROUND PASS	79,00 €	67,15 €	55,30 €	39,50 €	130,35 € (1 + 2) 189,60 € (2 + 2)
DAY TICKET	13,00 €	11,05 €	9,10 €	6,50 €	21,45 € (1 + 2) 31,20 € (2 + 2)
SPORT TICKET	18,00 €	15,30 €	12,60 €	9,00 €	29,70 € (1 + 2) 43,20 € (2 + 2)
OPENING CEREMONY (div. Categories)	29,00 — 79,00 €	24,65 — 67,15 €	20,30 — 55,30 €	14,50 — 39,50 €	59,45 — 174,55 € (1 + 2) 88,45 — 240,95 € (2 + 2)
CLOSING CEREMONY	39,00 €	33,15 €	27,30 €	19,50 €	79,95 € (1 + 2) 118,95 € (2 + 2)

Ermäßigter Preis: students, pupils, seniors, people with disabilities
Jugendliche: aged 13 to 17 years
Kinder: imaged 5 to 12 years (under 5 years free)
Familie: 1 adult + 2 children or 2 adults + 2 children

A major, lasting advantage of the ticketing concept lay in the integration of free public transport into all official event tickets. Most accreditations also included a free public-transport ticket. This eliminated additional mobility costs and at the same time made arrival at the venues financially easier and ecologically more sustainable.

Shortly before the start of the event, additional discount campaigns further lowered access barriers in order to activate as broad a spectator base as possible and to further promote participation.

ABSOLUTE TICKET PRICES OF DIFFERENT SPORTS EVENTS



Digital accessibility

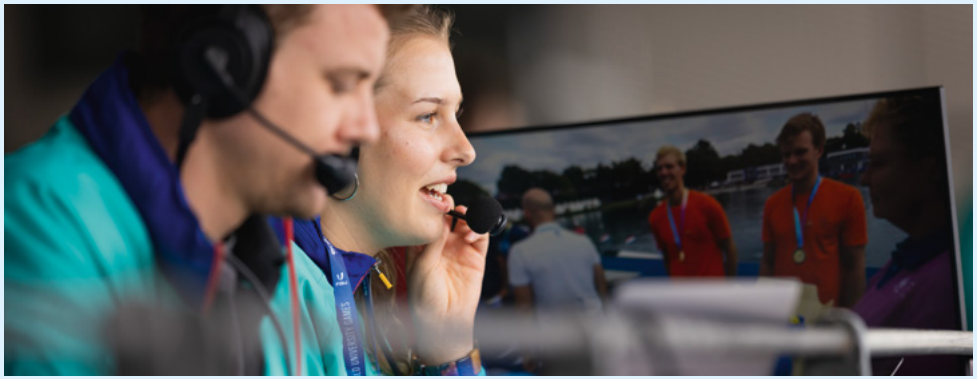
In the area of digital channels (including website, event app and social media), the focus was on continuously dismantling barriers. In the development of website and app, central accessibility standards were taken into account. In addition, people with disabilities were involved in order to create content in German Sign Language and to provide feedback on implementation.

OVERVIEW OF DIGITAL MEASURES

Eye-Able Website Assistant	implemented
Video subtitling	implemented
Alt texts for images	partially implemented
Contrast values	partially checked
Content in plain language (DE/EN)	implemented
Content in German Sign Language	implemented

Physical accessibility

At the venues, particular emphasis was placed on ensuring as high a level of barrier-free access as possible. In preparation, venue visits took place to identify potential barriers at an early stage and to remove them as far as possible. The Inclusion Volunteers checked the areas relevant for spectators at the beginning of each shift. In addition, the digital »Spectator Guide« contained information on the accessibility of the venues.



Inclusive live services

At the Opening Ceremony at the Schauinsland-Reisen-Arena as well as at numerous final events in various sports — including Badminton, Basketball, Beach volleyball, Athletics, Rowing, Swimming, Tennis and Volleyball — three inclusive live services were offered: audio description, German Sign Language interpreting and induction hearing loops. These services could be booked free of charge in the ticket shop and, with the Rhine-Ruhr 2025 FISU World University Games, were extended to sports in which such offers had so far rarely or never been available.

For the 3x3 Wheelchair basketball matches, audio description was also provided with receiver devices on one day when needed. In addition, subtitling of the speeches was displayed at the Opening Ceremony, which was aimed in particular at people with speech impairments. These inclusive live services were intended to enable people with disabilities to participate and to offer them a high-quality event experience.

Audio description
~105 hours;
around 2,850 listeners, with Athletics recording the highest audience at around 1,000 listeners

In cooperation with **T_OHR** and **mycrocast**, the event was made available in descriptive audio language (audio description). An experienced reporter and a »Young Sports Media Talent« (see p. 106) provided the live audio format on-site, which could also be received as a radio format »All Ears on«. The offer was aimed at people with visual impairments as well as at interested people who wanted to get to know different sports and their specific features in an audiovisual way.

Sign Language interpreting
~100 hours

Professional German Sign Language interpreters were on-site and translated the event into German Sign Language. Beyond that they also acted as contact persons for deaf people.

Induction hearing loops
~100 hours

An audio feed of the moderation was transmitted via the **Listen Everywhere app** and an induction loop to hearing aids. This service was aimed at people with hearing aids.

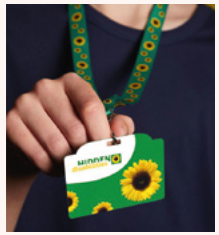
Diversity awareness and inclusive participation formats

Both in the run-up to the Games — for instance through a theme day at the **Para Sport Lounge NRW 2024** and participation in the **Internationale Wochen gegen Rassismus 2025** — and during the event, topics around diversity were made tangible through infotainment and participation formats. For example, alongside 3x3 Wheelchair basketball at the Jahrhunderthalle, Wheelchair basketball try-outs were also offered. In addition, all festival partners were asked to design their programmes to be as inclusive as possible. Information on accessibility could be found on the website.

This offer is open to all, and there is a great willingness to enable everyone to take part.

Alongside the official competitions, special show matches in Para Badminton at the Westenergie Sporthalle before the finals, and on the Center Court of the ETUF tennis facility with Special Olympics athletes, made people with disabilities in sport more visible and opened up additional spaces for encounter.





Hidden Disability Sunflower:

For people with hidden disabilities who wore the Sunflower lanyard, the spectator services team was sensitised in order to be able to provide targeted support as needed. The Sunflower lanyard (Hidden Disability Sunflower) is an instrument for hidden disabilities that allows a person to voluntarily signal that a disability or illness is present that is not visible at first sight. In this way, a helping hand, more understanding or additional time can be requested in shops, at the workplace, on public transport or in public space.

SPOTLIGHT: THINKING INCLUSION IN UNIVERSITY SPORT FURTHER – THE RHINE-RUHR 2025 SPORTS AND INCLUSION SUMMIT SETS IMPULSES

At the Sports and Inclusion Summit on 19 July 2025 in Bochum, diversity, participation and inclusion in international university sport were at the centre of attention. The joint event organised by the State Chancellery of North Rhine-Westphalia and the adh in the context of the Games brought together representatives from sport, academia and politics. The result of the exchange was the »Rhine-Ruhr 2025 Initiative Paper«, which formulated recommendations for a more inclusive organisation of future major sporting events (Legacy).

The milestone of the first-time integration of Para Sport 3x3 Wheelchair basketball into the programme of the Games was also highlighted. The adh, together with the State of NRW and FISU, thus set a strong signal for lived inclusion in university sport. The Initiative Paper was understood as the starting point of a continuous process for the structural anchoring of inclusion — for example through low-barrier infrastructures, inclusive educational offers, digital access and greater visibility of inclusive achievements. FISU intends to continue this path at future Games — for example in 2027 in South Korea with Para Taekwondo.



EXCURSUS: SOCIAL SUSTAINABILITY OF THE RHINE–RUHR 2025 FISU WORLD UNIVERSITY GAMES

Quantitative analysis of the satisfaction and perceived event quality of people with disabilities

Frederike Albrecht
(IST-Hochschule für Management, Master's programme Sportbusiness Management)

The Master's thesis by Frederike Albrecht at the IST-Hochschule für Management analysed the social sustainability of the Rhine-Ruhr 2025 FISU World University Games. The focus was on satisfaction and the perceived event quality of people with disabilities. The aim was to investigate to what extent inclusive measures during the Rhine-Ruhr 2025 FISU Games were perceived and what contribution they made to an equal event experience.

The study was based on a quantitative survey of spectators with and without disabilities. The basis was a model of event quality that was extended by the aspects of accessibility, participation and inclusion. According to the results, the Rhine-Ruhr 2025 FISU World University Games were rated overall positively by both groups. The friendly atmosphere, the openness of the volunteers and the practical implementation of inclusion were especially highlighted. Services such as German Sign Language interpreting, audio description and induction hearing loops were recognised as significant and visible contributions to social sustainability.

At the same time, respondents made clear that the consistent implementation of barrier-free infrastructure is decisive in order to further improve the overall experience — in particular with regard to way-finding, signage and service staff. The results also showed that social sustainability went beyond structural accessibility and arose substantially through encounters, awareness and the shared experience of sporting diversity.

The study thus provides important insights for future major sporting events in Germany and internationally. It shows that social sustainability and inclusion are not additional aspects but essential elements for a successful event organisation.

»The analysis has made it clear that social sustainability and inclusion are the keys to the success of major sporting events. It was particularly important to me to make the experiences of people with disabilities visible and to derive practical approaches for future events from them. It is obvious that much has already been achieved; nevertheless, the need to implement barrier-free access consistently in all areas remains«

(Frederike Albrecht)

Organisations and people with disabilities involved

As part of the inclusion work, various organisations, specialists and people with disabilities were actively involved. These included, among others, the **Event Inclusion Managers in Sport** (EVI), who were represented at the Games by Louis Kleemeyer. In this context, cooperation took place in particular with EVI project participants at the Deutscher Badminton-Verband. A central element was also the EVI closing meeting, which took place on-site during the event days.

In addition, there was intensive cooperation with the Behinderten- und Rehabilitationssportverband NRW e. V. (**BRSNW**). Ralf Bockstedte, chair of the Essen Inclusion Advisory Board and politician, was also involved in the activities. For barrier-free communication, Sign Language videos were implemented in cooperation with Christoph Bischlager (an elite athlete who is deaf), among others. In addition, **Funky e. V.** contributed stage performances to the visibility of inclusive perspectives. Athletes were also actively involved, including Special Olympics tennis athletes as well as Para Badminton players.



EXCURSUS: EFFECTS OF THE EVENT ON INTERCULTURAL EXCHANGE AND ANTI–DISCRIMINATION

To improve intercultural relations between people in the long term, active communication processes and exchange must be promoted in a targeted way. Sports events offer a suitable platform for this. Intergroup contact can produce diverse effects — such as the reduction of prejudice, the promotion of equality and cooperation, and the building of trust.

The evaluation of the safeguarding and awareness work showed a high effectiveness of the implemented measures (Master's thesis by Malte Kippenhahn, Johannes Gutenberg-Universität Mainz). 93% of respondents stated that they had experienced the Rhine-Ruhr 2025 FISU World University Games as a place of intense intercultural encounters. In addition, a high level of respect and openness towards other cultures was perceived, while only 5% of respondents reported having experienced or observed discrimination (see Annex Methodology I).

Volunteers, in particular, had frequent interactive contact with people from other cultures (contact rate: 89.7%), since the structural conditions (work tasks, team composition, accommodation and repeated interactions) systematically offered more opportunities for contact (Master's thesis by Sebastian Ramspott, Universität Bayreuth). Spectators, on the other hand, often remained within their own group and were less frequently part of such encounters (28%). Positively experienced contacts noticeably reduced prejudice towards other cultures. In addition, the Games fostered a superordinate event identity, in which people did not primarily perceive themselves as Germans, Brazilians or Chinese, but first of all as part of a shared »student-athlete community« with a »we feeling«. The more pronounced this group feeling was, the more comprehensively prejudice could be reduced (see Annex Methodology J).

The promotion of understanding among peoples therefore required actively designed opportunities for contact — such as shared spaces, moderated exchange formats and longer interaction times.

SPOTLIGHT: SAFEGUARDING AND AWARENESS – INCLUDING COMPLAINTS MECHANISM

The safeguarding and awareness work, as well as the associated complaints mechanism in the form of reporting points, acted as an overarching measure of the sustainability strategy, in particular in the context of the human rights work.

SAFER SPACE

What is the Safeguarding and Awareness Concept?
In the event context, the Safeguarding and Awareness Concept promotes respectful interaction and, through clear rules of conduct, creates spaces that are as safe as possible — in which transgressions and discriminatory behaviour have no place. It provides initial support and retreat areas, raises awareness of inclusion, and preventively contributes to participants feeling respected and welcome. It also makes it possible to report potential human rights violations directly and, where necessary, refers to further support services.

What does it not provide?
The concept is not a universal solution and cannot replace a clear stance from all those involved. It cannot eliminate the causes of discrimination or violence but mainly serves to provide acute support, protect those affected and offer orientation in challenging situations. Professional psychological or therapeutic care cannot be replaced by it during events.



Central modules of the Awareness Concept

Code of Conduct: The Code of Conduct translated the Statement of Principles on the respect for human rights and on sustainability into concrete rules of conduct. It served as a guide for respectful interaction, applied to all event participants during the event and was published on the website.

Workshops and training: To prevent discrimination within the Organising Committee, workshops and theme days for staff were held to raise awareness and address societal structures and perspectives. In addition, the Safeguarding and Awareness Concept was integrated into the official Volunteer Training. Volunteers who actively supported the safeguarding and awareness teams during the event received additional, dedicated sessions as part of qualification training.

OVERVIEW OF WORKSHOPS & THEME DAYS

- May 2024: **Diversity Day action day**
- September 2024: **Para Sport Lounge NRW, incl. hands-on workshops, presentations and a panel discussion**
- December 2024: **internal workshops on inclusion in the workplace**
- March 2025: **Internationale Wochen gegen Rassismus — internal diversity moodboard**
- May 2025: **Diversity Day action day**
- June 2025: **Safeguarding and Awareness training for internal staff**
- July 2025: **Volunteer qualification training on awareness work**

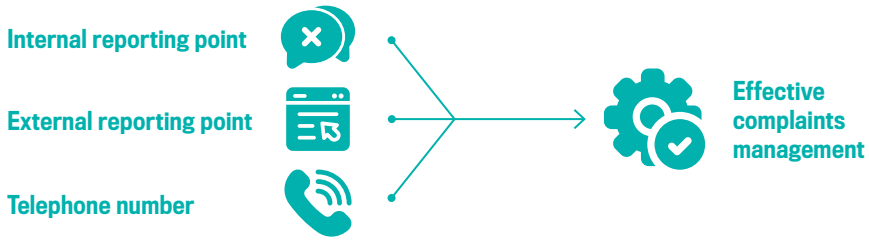


Safeguarding & Awareness Team and Safer Spaces:
The Safer Spaces offered supervised, safe retreat areas at the Rhine-Ruhr 2025 festival locations for affected persons and for people who needed quiet. They served as places of recuperation, for initial psychological support, for sharing information about further support services and as a personal reporting point for incidents. The Safer Spaces were furnished with couch elements and yoga mats and were equipped with emergency items including earplugs, menstrual products and sunscreen. In addition to the supervision of the Safer Spaces, members of the Safeguarding & Awareness Team (identifiable by their purple vests) were also continuously on the move on foot at the largest venues.

Info posters: Info posters visibly informed people on-site about the Safeguarding and Awareness Concept, the Code of Conduct, the reporting points and the team, and raised awareness for respectful interaction. They were mainly placed in toilets and at information points.

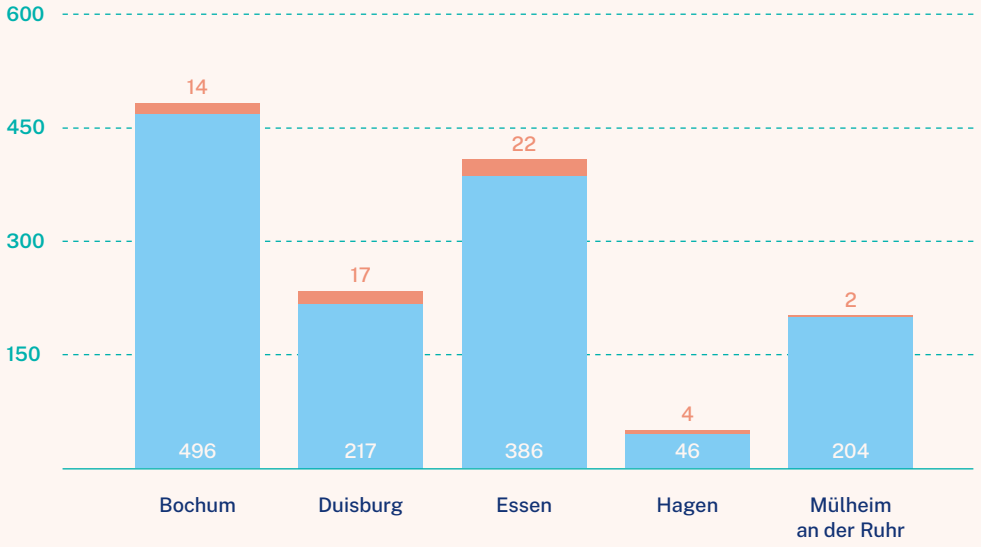
What is the complaints mechanism in concrete terms?
As a central instrument of human rights work, a complaints mechanism enabled individuals or groups to raise concerns, complaints or conflicts in connection with the event, to report incidents and to initiate solutions. It helped to ensure that human rights- and environment-related problems were handled as quickly, transparently and fairly as possible. The introduction of such a mechanism was also intended to strengthen stakeholders' trust in the event.

Digital reporting point and telephone number: Already during preparation, in spring 2025, a reporting point was set up on the website, which remained available during the event and for some weeks afterwards. The digital form acted as a central external reporting point for incidents and information on discrimination, human rights violations and breaches of the Statement of Principles; a total of 28 incoming entries were recorded. Already in 2023, for staff, an internal digital reporting point in accordance with the German Whistleblower Protection Act had been set up. In addition, a telephone number was available throughout the entire event period as a further option for reporting. Two calls were registered here.



Central modules of the complaints mechanism

SUMMARY AND EVALUATION OF THE SAFEGUARDING AND AWARENESS WORK:



The evaluation and summary of the safeguarding and awareness work were conducted in cooperation with **Guardian Angels**. With regard to reported incidents and intervention cases, the following thematic priorities emerged: other topics, interpersonal violence, discrimination and accessibility. The topic of safety was named only once; no further topics were recorded.

EXCURSUS: SOCIAL IDENTIFICATION AND NATIONAL AWARENESS THROUGH MAJOR SPORTING EVENTS

The results of a survey of 520 spectators (see Annex Methodology K) provided insights on a central indicator of the Federal Ministry of the Interior's National Strategy for Major Sporting Events in the context of national identification and pride (Master's thesis by Kristin Fischer, Johannes Gutenberg-Universität Mainz). The data showed that 47.5% of respondents resident in Rhine-Ruhr as well as of accredited participants of the Rhine-Ruhr 2025 FISU Games considered it important that athletes from their own country were successful at the Games. 49.8% stated that they felt great when German athletes won. 66.2% (rather) agreed with, or fully agreed with, general pride in their country. At the same time, 83.9% rejected the statement that sporting defeats cast a bad light on their country.

Gender and educational level had no significant influence on these attitudes. Age, however, had an effect: younger respondents reacted more emotionally and showed a stronger national identification, in particular regarding the significance of sporting success and the evaluation of defeats.

Overall, the results indicated that sporting successes promoted pride and national identification, while defeats were not rated negatively. A factual, positive basic stance thus emerged, which suggested that the Rhine-Ruhr 2025 FISU World University Games contributed to social cohesion.



EDUCATION AND ENGAGEMENT

KEYFACTS

- **Volunteers emerged from the Games highly motivated and showed an increased willingness to engage voluntarily in the future — both at events and in clubs.**
- **The award ceremonies at the FISU World Conference (for students and universities) increased the visibility of academic and sustainability-related engagement.**
- **Participation programmes such as the Discover Route significantly increased spectator participation, displayed a strong activating and inviting character and promoted playful learning.**
- **Ambassadors with inspiring biographies enriched the formats, made content more tangible and increased attention to and credibility of the topics.**

The Rhine-Ruhr 2025 FISU World University Games anchored academia as a central event element and linked top sporting performances in a special way with education and the transfer of knowledge.

Alongside hosting the FISU World Conference, exchange was sought during the preparation phase with schools, universities and initiatives (in sport) that promote **education for sustainable development** (ESD). From this, numerous cooperations with students and university members emerged, as well as projects with schools in North Rhine-Westphalia and beyond. In addition, various action days were held before the Games, which supported ESD and were thematically embedded in the respective focus areas.

During the event days, the festival modules Sports, **Kids Space**, **Culture**, **Comfort Zone** and the **Discover** module created a varied edutainment offer for all age groups. At the festival sites — Jahrhunderthalle Bochum, Sportpark Duisburg and Grugapark Essen — playful approaches to education and engagement through sport and beyond were made possible. Educational offers for volunteers and delegations are standard at international major sporting events and were also implemented at the Rhine-Ruhr 2025 FISU Games. The concrete measures and impacts are presented below. With them, a contribution to SDGs 4 and 17 in particular was intended.

OBJECTIVES

- **Various educational and cultural programmemes for visitors and participants**
- **Co-design of students and universities**
- **Making the 17 SDGs and values of sport visible and tangible**

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

The central stakeholder group of the event was students and university members. They co-shaped the Rhine-Ruhr 2025 FISU World University Games in many different ways. This ranged from OC collaboration to seminars, university sports events, participation in the Torch Relay and the co-design of the cultural programme, and on to numerous academic research and thesis projects before, during and after the Games. After students had first been involved through, among other things, the »Legacy & Sustainability University Workshop« and the »Torch Design Competition«, further concrete projects for and with students followed. The lighthouse projects from this area are described below.

International lecture series and podcast »Rhine-Ruhr et al. (2025)«

In the run-up to the Rhine-Ruhr 2025 FISU World University Games, Hochschule Macromedia (Hamburg), together with further international partner universities, developed a lecture series on the history and development of university sport with a particular focus on the sustainability and Legacy of major sporting events. At the centre stood pioneers, visionaries and institutions such as FISU and national university sports federations. Internationally renowned lecturers (including from the USA, South Africa, Australia, Brazil and China) brought together the state of research and global perspectives on university sport and the World University Games. In the winter term 2024/2025, the series offered well-founded insights into current research, promoted international exchange and set impulses for the future development of university sport.

The format was complemented in the summer term 2025 by an accompanying podcast, which took up and deepened the content and made it accessible to a wider audience. Both the lectures and the podcast were recorded, made freely available and, where possible, are intended to remain accessible in the long term as a lasting pool of knowledge. Questions can be addressed to Prof. Dr. Thomas Horky: t.horky@macromedia.de



YOUNG SPORTS MEDIA TALENTS

FISU Young Sports Media Talents

With this project, the existing format of the »**FISU Young Reporters**« was extended by two further thematic areas, and at the same time a digital educational platform was built up. National and international students thus had the opportunity to develop their skills over a period of six months in the three thematic areas of **journalism, photography and audio description** and, in parallel, to gain practical experience.

The programme, funded by **Erasmus+** and **U-Media**, included **28 participants** and, in addition, **10 U-Media Ambassadors** as student reporters. In the area of photography, the up-and-coming talents were also supported by **Nikon**. In close cooperation with **Hochschule der Medien Stuttgart**, **Universität Tübingen** and **Universidade do Porto**, the U-Media platform was first developed as a digital »Learning Hub«. Between March and June 2025, a total of eight »**U-Media Expert Lectures & Workshops**« took place, in which the participants received professional mentoring by media professionals.

The Young Sports Media Talents were able to apply the knowledge they had acquired as part of the accredited media team during the Games and to gain initial practical experience in the context of an international major sporting event. In addition, a »Student Newshub« was created on the U-Media platform, on which student articles were published during the event.

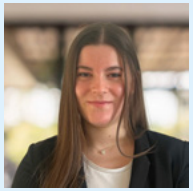
The mood during the Games was marked by high motivation. The feedback from participants and mentors was predominantly positive. Despite the intensive event days, the Young Sports Media Talents gained multifaceted insights and were able to take valuable experiences with them from both the preparation phase and the event days. Feedback from personal conversations also showed that some participants intended to engage further, in the long term, in the areas of sports journalism, photography and audio description.



Eugene Goh (Singapore): »Over 10 days in Germany, I got to learn the key basics of sports photography from Lukas Schulze. Through our daily review sessions after our shoots and discussions regarding the assignments we were going into, I've learned a great deal, such as workflows, technical skills and much more. I've come to realise that details I once overlooked can significantly enhance the appeal of my photos.«

Lara Zugck (Germany): »From my first live on-court interviews for FISU.tv to interviews in the mixed zone with the medallists, social media, and writing stories for FISU.net, I had the chance to interview so many kind and inspiring athletes across a wide range of sports. All of this was only possible thanks to the best team around me and two great mentors: Michel Bélanger and Stéphane Jobin.«





Valentina Rasini (Italy):»This project helped me sharpen my journalistic skills, and reminded me how much I love being where the action is: listening, observing, and telling the stories that matter.«

PROJECT TIMELINE

Januar 2025: **start of the application phase and beginning of the education programme**

February 2025: **end of the application phase**

March 2025: **selection of participants and start of the lectures**

May 2025: **official announcement of participants**

June 2025: **final briefing of participants**

July 2025: **deployment of participants at the Rhine-Ruhr 2025 FISU World University Games**

Project funding: UMEDIA Co-funded by the European Union

SPOTLIGHT: RHINE-RUHR 2025 FISU WORLD CONFERENCE

WORLD CONFERENCE
RHINE-RUHR 2025

Under the conference title »**Competing for Change: Exploring Sustainability and (Mental) Health**«, the focus was on engaging with **social and ecological sustainability topics**, with a particular emphasis on **(mental) health promotion**.

Both **abstracts** and **projects** could be submitted (**abstract submissions:** 80 participants from 19 nations; **project submissions:** 13 participants from 8 nations). In total, **100 participants from 23 nations** presented their academic work and projects in the form of talks and poster sessions. In addition, further ticket holders and invited guests (including representatives of universities, institutions and international organisations) took part and contributed to workshops and further conference formats.

Content-wise, sustainability was examined from different perspectives: alongside ecological questions on campus, **mental health, performance pressure, work-life balance and the well-being of athletes**, coaches and students were in the foreground. The conference was structured around four thematic priorities:

1. **Mental health and performance under pressure**
2. **Balance and resilience in elite sport**
3. **Ecological sustainability at universities**
4. **Health and well-being in sport and physical activity**

Particular attention was paid to the combination of academia, sport and culture. The venue, the Jahrhunderthalle Bochum, was at the same time the Competition Venue for 3x3 Basketball, 3x3 Wheelchair basketball as well as the Ruhr Games 2025 as part of the festival programme. Through this integrative concept and highlights such as an open poster session next to the 3x3 warm-up court, the live podcast with Mischa Zverev and the panel discussion with Fabian Hambüchen, the conference themes were also made visible to a broad audience.

Various sustainability aspects were also implemented organisationally, including:

- Fully vegetarian/vegan catering with reusable tableware
- Sustainable gifts in the form of a potted plant
- Welcome bag made of recycled material with everyday-usable giveaways

- Lanyards made of recycled polyester
- Largely digital solutions (e.g. tickets, invitations, certificates, programme booklets)
- Multiple use of branding and equipment elements
- Free childcare
- Near-balanced gender representation on stage (over 60 % female)

With the activist **Domitila Barros** as moderator and sustainability ambassador, the conference had a strong voice that built bridges between academia, society and environmental awareness. Together with a student co-moderator, **Lena Zaubzer**, participation by the young target group was made visible.

The results of the survey conducted as part of the FISU World Conference were overall very positive and indicated a substantial effect beyond pure knowledge transfer. With regard to knowledge building, networking and both individual and institutional calls to action, clear impact effects were visible. 86% of the participants stated that they had acquired new knowledge, so that the conference fulfilled its function as an academic transfer and learning format and opened new perspectives on the topics of sustainability and (mental) health.

A clear networking and cooperation effect also emerged: **65% of respondents** saw a potentially positive influence on future cooperation between scientists. The FISU World Conference thereby made a relevant contribution to strengthening academic networks and to promoting interdisciplinary and cross-institutional cooperation. On an individual level, many participants reported personal development, new motivation for upcoming projects and a deeper reflection on their own academic work. These effects went hand in hand with an increased problem awareness and a better understanding of the importance of the conference themes. At the same time, many participants felt confirmed in their current work and academic orientation; the transfer of current research results was overall rated predominantly positively.

In the overall view, the survey results underline the importance of the FISU World Conference as an effective format for knowledge transfer, networking and sustainable impulse setting in the areas of sustainability and (mental) health (see Annex Methodology L).

The Rhine-Ruhr 2025 FISU World University Games coincided with the first two weeks of the summer holidays in NRW. This made it possible to involve children and adolescents as a priority, conveying interesting content through sport and granting them active participation in the major sporting event. Schools were involved already in the run-up, and the Kids Space module at the Rhine-Ruhr 2025 Festival offered around 38 target-group-appropriate participation programmes. The following section presents one lighthouse project as well as further educational initiatives for the young target group.

Adopt A Delegation

As part of the Rhine-Ruhr 2025 FISU World University Games, a project was launched in which schools could »adopt« delegations of participating nations. In individual projects, pupils engaged with the national characteristics of their respective delegation. In particular, the exclusive contact with the delegations and the personal insights thereby made possible turned the project into a special highlight. Intercultural exchange was at the centre.

In the further course, the project was also extended to universities. While many pupils discovered student elite sport and the multi-sport event in their region anew, international relations between universities were simultaneously built up and intensified. The support and communication of the participating project partners turned out to be particularly challenging.

All project partners received a certificate as a keepsake. In total, 30 delegations were adopted by schools, universities and institutes of higher education throughout Germany. Around 3,000 pupils and 1,300 students were actively involved, so that the project did not only promote education and sporting engagement but also sustainably strengthened intercultural exchange.



SCHOOL PROJECTS

The start of the school projects was made by the **Sophie-Scholl-Berufskolleg in Duisburg**. The pupils organised their Mini FISU Games in three of the Rhine-Ruhr 2025 sports — Volleyball, 3x3 Basketball and Table tennis — together with their Dutch partner school from Arnhem. In addition, they also acted as contact persons for deaf people.

The **OGS of the Naturschule in Bochum** began already in the Easter holidays to get to know their partner delegation from Poland better — not least by means of home-made Pierogi. In their project week, they crafted their own Witamy signs (»Welcome«) and tried their hand at archery.

The pupils of the **Landrat-Lucas-Gymnasium in Leverkusen** — one of the participating elite schools of sport — discovered the history and culture of Kazakhstan and explored the host cities of the Games in the Ruhr region in person.

UNIVERSITY PROJECTS

TU Ilmenau placed its University Campus Fest entirely under the motto of the Rhine-Ruhr 2025 FISU Games. The university leadership was all-in on taking on student challengers in 13 creative challenges. »Beat the Boss« in the campus edition promised heated competitions in Swiss log-nailing and Swedish rubber-boot throwing.

The University Sports Centre of **HU Berlin** reported in flawless Swedish on their Midsommar festival with more than 100 students.

The University Sports Centre of **RWTH Aachen** supported the delegation from Costa Rica with a social-media campaign.

Promoting youth engagement

In cooperation with the Landessportbund and the Sportjugend NRW, a networking meeting for young engaged people was successfully implemented during the Park Festival in Grugapark Essen. Adolescents and young adults aged 15 to 27, who were actively involved in sports clubs and federations, could present their ideas and exchange with like-minded people. The meeting, with around 120 participants, offered a platform for networking and inspiration and strengthened voluntary engagement in sport.

EXCURSUS: SPORT–EVENT VOLUNTEERS AND VOLUNTEERING LEGACY

The survey of volunteers carried out around three months after the Games produced an overall **very positive** picture. **The satisfaction of the 240 surveyed volunteers, at 89%, was at a high level** (see Annex Methodology M).

It became particularly clear that the engagement was primarily motivated by personal values (M = 5.9 on a scale from 1 = »does not apply at all« to 7 = »fully applies«). The volunteers stated: »I engaged as a sport-event volunteer because I wanted to do something valuable.« The love of sport also played an important role. This motivation factor was also assessed via corresponding statements, for example »I engaged as a sport-event volunteer because sport is something I love« (M = 5.5). By contrast, the importance of extrinsic incentives was significantly lower: material aspects such as free catering (M = 2.4) played only a minor role.

In their activity, the surveyed volunteers rated the uniqueness of the event (M = 5.8) and the clearly defined period of deployment (M = 5.8) as particularly attractive. Being part of the volunteer community was also perceived as very attractive (M = 5.5). Volunteers were considerably less satisfied with the selection process, which they rated at a comparatively low M = 3.1.

With regard to future engagement intentions, an increase was evident among the surveyed volunteers through the Games, both in awareness and in the intention to engage voluntarily in the future (Legacy). This underlines the potential of the event to positively influence long-term attitudes and interests:

- **60% showed an increased general intention to engage voluntarily.**
- **86% reported an increased willingness to take part again in a major sporting event.**
- **38% showed an increased willingness to become involved in club-based sport.**
- **63% expressed an increased general interest in voluntary work.**
- **65% stated that their awareness of the variety of engagement opportunities had grown.**

The results to date indicate an increased willingness for future voluntary engagement but represent only a declaration of intent. Through the survey conducted three months after the Games, it could nevertheless be established — albeit only to a limited extent because of the short period — that at least 6.7% of respondents had been directly motivated to further voluntary engagement solely by the Rhine-Ruhr 2025 FISU World University Games. These were volunteers who had not been engaged voluntarily before the Games but who subsequently became involved and explicitly attributed this engagement to their volunteer activity at the Rhine-Ruhr 2025 FISU Games.

In addition, the special group of first-time volunteers was examined qualitatively (Bachelor's thesis by Justin Torrez, Johannes Gutenberg-Universität Mainz). First-time volunteers are people who had not yet gathered experience in sport-event volunteering before the Rhine-Ruhr 2025 FISU Games. The results of the interviews conducted make clear that this group experienced their first engagement predominantly positively. Their motivation was largely intrinsic in nature: joy in sport, curiosity and the strong sense of community within the team acted as central drivers. Any initial uncertainties, when procedures were not yet clear, could be quickly dismantled through reliable communication and mutual support. Across the board, social interaction proved to be a key factor for satisfaction and loyalty (see Annex Methodology N).

Overall, it becomes clear that the Games set important impulses for a sustainable Volunteering Legacy. The results underline the potential of major sporting events as a platform to strengthen motivation, to broaden awareness of engagement opportunities and to win people over for voluntary engagement and organised sport in the long term.



Kinder-Uni — hands-on academia

The **Kinder-Uni** (children's university) programme item was integrated into the Park Festival, providing the young audience with interactive access to academia. In cooperation with Junior Uni Essen, target-group-appropriate formats were implemented that stimulated curiosity and a spirit of research and, in particular, promoted science education.






Educational programmes for participants and spectators and the recognition of significant sustainability-related and academic engagement were also in focus. The following sections report on these activities.

Workshops for delegations and volunteers

In cooperation with the Nationale Anti Doping Agentur (NADA), activations were not only implemented at all festival sites, but a specific educational programme on clean performance was also offered as well as an anti-doping workshop with well-known personalities, including IOC member and gymnast Kim Bui and Judo European Champion Alina Böhm (title: »A Pill Against Performance Pressure?«).

Volunteers were reached through digital and in-person training sessions. Volunteer Centers in particular developed into places of networking, exchange and skill-sharing.





Rhine-Ruhr 2025 Awards ceremonies

To promote and recognise academic, ecological and social engagement, the Rhine-Ruhr 2025 Awards were created and ceremoniously presented as part of the FISU World Conference in Bochum (see p. 108–109). The awards honoured outstanding contributions in the areas of academia and sustainability. They recognised the engagement of the participating actors and were at the same time intended to act as inspiration to carry forward the positive influence of sport and academia on society and the environment.

Outstanding Thesis Award: The award recognised academic engagement, strengthened dialogue between research and practice and set impulses for a sustainable further development in international (university) sport. For the first time, outstanding theses by students who had dealt with major sporting events, university sport or multi-sport events were honoured in the context of the FISU World University Games. An independent jury evaluated five submitted works on academic quality, level of innovation and practical relevance.

1st place: Maxime Launay (Universität Bayreuth) »Paris 2024 as a pilot project of IOC modernisation: a survey study on the Olympic attitudes of the population« (M. Sc.)
2nd place: Gero Ziegler (Ruhr-Universität Bochum) »Analysis of the scoring potential of different manoeuvres in professional women's surfing« (B. Sc.)
3rd place: Dennis Köstler (Ruhr-Universität Bochum) »Ashwagandha Supplementation During a 12-Week Resistance Training Program Does Not Improve Heart Rate Variability, Cortisol, and Stress Perception in Physically Active Adults« (M. Sc.)

Green Delegations Award: For the first time, the Green Delegations Award was presented as part of the FISU World University Games to honour delegations that have particularly committed themselves to ecological sustainability. An independent jury assessed the contributions in terms of impact, level of innovation and feasibility. The award winners set visible signals for environmental protection and the taking of responsibility in international university sport:

1st place: Uganda tree-planting actions, virtual planning meetings, awareness workshops
2nd place: Georgia »Green Kits«, zero-waste strategy, climate compensation
3rd place: United Kingdom recycled materials, group travel, avoidance of single-use plastic

FISU Healthy Campus Label: The certification recognised engagement for health, well-being, sustainability and social responsibility on campus (see p. 82). Seven universities received the highest Platinum level, two universities were honoured with Gold — a strong signal for the international reach of German university sport.

Awarded universities::
Hochschule Magdeburg-Stendal (FH)
Humboldt-Universität zu Berlin
Leibniz Universität Hannover
Universität des Saarlandes
Georg-August-Universität Göttingen
Universität Paderborn
Universität Regensburg
Eberhard Karls Universität Tübingen
Bergische Universität Wuppertal

In addition, the Rhine-Ruhr 2025 FISU Games supported the call for applications for the fifth edition of the **adh-Förderpreis Nachhaltigkeit** (adh Sustainability Prize) for all member universities. Each year, small and large innovative projects and concepts as well as individual measures from all sustainability dimensions are honoured, which have sustainably changed and future-oriented further developed university sport. Details can be found on the adh website.



[SDG] Discover Route

The **Discover Route**, as an interactive learning and experience space for sustainability and academia, extended across the three festival sites — **Jahrhunderthalle Bochum**, **Grugapark Essen** and **Sportpark Duisburg**. Spectators could explore the 17 Sustainable Development Goals (SDGs) playfully. The Discover module, like the Sports Diploma, came with a run card.

Around 4,000 participants used this run card to move through a variety of participation activities and to collect SDG stamps: from democracy fitness and fair target throwing, through the zero-waste parcours, SDG Jenga and a plant quiz, to the Sport for Development exhibition. The aim was to make the SDGs more visible, to convey education for sustainable development in a lively way, to awaken curiosity and to encourage exchange. Small sustainable gifts rounded off the experience and set motivational impulses to become active oneself. Particular thanks go to the Internationale Gartenschau (IGA) 2027, which was not only part of the route but also provided a large share of the gifts.

Outside the regular Discover Route, the PLAY4SDGs travelling exhibition at the **Westenergie Sporthalle in Mülheim** an der Ruhr was intended to strengthen awareness and engagement for sustainable development in Badminton and in (sporting) everyday life. The exhibition was accessible throughout the entire competition days. Also in the host city of Berlin, ESD activities were integrated: at the Max-Schmeling-Halle, Engagement Global Berlin hosted a participation offer on the topic of fair trade in (Volleyball) sport, and Safe Sport e. V., as contact point for sexualised violence in sport, provided information and edutainment offers during the finals of the Volleyball competitions.

A survey of participants in the programme showed that the majority reacted overall positively to the educational offer (Master's thesis by Mehdi Al Madani, Johannes Gutenberg-Universität Mainz). This suggests that the Discover Route effectively engaged spectators and encouraged both an emotional and a cognitive examination of sustainability topics. Further analyses showed that participants who perceived the programme as particularly appealing also showed a higher general interest in sustainability.

In the qualitative part, it emerged that the stand operators described the Discover Route as a playful learning offer which, through elements such as stamps and games, strengthened motivation and curiosity. The design of the environment and the materials used also supported openness and engagement. At the same time, it was shown that for tasks that were perceived as too easy or too difficult, the learning process partly failed to materialise. Overall, the stand operators rated their own adaptability to different groups as high (see Annex Methodology O).









SPOTLIGHT: SPOTLIGHT: AMBASSADORS FOR SUSTAINABILITY, ART AND CULTURE

Sustainability was understood as a joint effort — visible also in the engagement of two experts from the areas of sustainability, culture and art. They conveyed the central values of the sports festival beyond sport and set inspiring impulses as ambassadors.

Ambassador for sustainability: Domitila Barros
Domitila Barros gave a strong voice to social sustainability topics, in particular around diversity, and was convincing as moderator of the FISU World Conference 2025. Together with her, awareness for urgent environmental and societal issues was sharpened in the run-up to and during the Games. The guiding idea was to encourage, to convey hope and to inspire people to commit themselves, in and through sport, to a more just and more sustainable future.



About the person: Domitila Barros is an internationally known activist, entrepreneur and »greenfluencer« from Brazil. She began her path in a Brazilian favela, where as an adolescent she already initiated educational and participatory projects to improve the living conditions of her community. Today she uses her reach to make topics such as sustainability, empowerment and social responsibility visible worldwide.

Ambassador for art and culture: Elisa Klinkenberg
At the Rhine-Ruhr 2025 FISU World University Games, Elisa Klinkenberg set a creative and colourful sign. With the artwork of the Container Stage at Grugapark Essen, she created a symbol of community, change and inspiration and encouraged creativity.



About the person: The Berlin-based artist links art and personal development in a special way. After her career as a professional tennis player, she found her new form of expression in art. Her works — with abstract colour gradients, organic forms and clear messages — combine artistic expression with a deep awareness of social responsibility.

4.3 ECONOMIC SUSTAINABILITY

KEYFACTS

- **A high macroeconomic impact arises when exogenous income (from outside the region) is spent within the Rhine-Ruhr metropolitan region and, through this, generates additional demand impulses that go beyond mere redistribution.**
- **The host region benefits more strongly when it provides services locally, since import outflows decrease and the regional impulse turns out higher.**
- **Strategically, the targeted attraction of international and out-of-region visitors is worthwhile, since they generate particularly high consumption impulses and bring additional value creation into the region.**
- **In the awarding of contracts, the focus — wherever possible — lies on local small and medium-sized enterprises, since they more often reinvest their revenues regionally (wages, procurement, services) and thereby strengthen the multiplier effect and local value creation.**

An economic sustainability assessment takes into account both a multi-year period and the tangible monetary effects as well as the less easily quantifiable intangible effects of the Rhine-Ruhr 2025 FISU World University Games. The focus of their economic sustainability lay on promoting regional value creation, while the following looks in particular at the value creation in the Rhine-Ruhr metropolitan region. At the same time, the positioning of the Rhine-Ruhr 2025 FISU Games as an attractive platform for national and international networking was at the centre. In addition, the cooperation and connections between the municipalities of the Rhine-Ruhr metropolitan region were to be strengthened.

Furthermore, the goal was to make the transforming host cities of the Rhine-Ruhr area more visible nationally and internationally and to increase their level of recognition and attractiveness. This was done in particular with regard to their multicultural diversity and their importance as a tourism destination. Event venues with symbolic character for the region were thereby temporarily turned into venues for numerous sporting competitions and programme elements of the cultural framework programme, including the Jahrhunderthalle Bochum, the UNESCO World Heritage Site Zeche Zollverein in Essen and the Landschaftspark Duisburg. Beyond that, the event opened up new perspectives, opportunities and possibilities for academic and personal networking, in particular for young students and other interested persons.

OBJECTIVES

› Positive, long-term economic effects for the Rhine-Ruhr metropolitan region

› Promoting the attractiveness of the Rhine-Ruhr metropolitan region as a location

› Creating an attractive platform, integration and networking of various local stakeholder groups

With this focus area, Rhine-Ruhr 2025 contributes to the SDGs:



Measures and impact analysis

Local Organising Committees (LOCs)

To ensure smooth planning and delivery of the Rhine-Ruhr 2025 FISU World University Games, an exchange with the municipalities and local partners in the Rhine-Ruhr metropolitan region was established at an early stage. To this end, the OC initiated four LOCs in the respective host cities (excluding Hagen and Berlin). The LOCs met at regular intervals, discussed current challenges and coordinated the on-site implementation of the events. This regional networking enabled efficient cooperation between the city, the trades, further central local stakeholders and the OC.

Call for Participation

With the »Call for Participation«, the Rhine-Ruhr 2025 Festival invited local society as well as organisations and artists to co-design the programme and to make the diversity of the Rhine-Ruhr metropolitan region tangible together. Around the sporting competitions, clubs, museums, schools and universities could bring in their passion. This took place on stage, in workshops, in children's and family activities, or on the official fields of play. In total, **more than 80 applications** were received: 16 local artists enriched the programme with concerts, performances and DJ sets. In the Show & Sport category, 19 partners presented spectacular and interactive formats, while eight partners in the Discover category made topics such as sustainability, academia and education visible. In this way, the »Call for Participation« enabled fair and inclusive involvement and laid the foundation for a vibrant and varied festival programme.

City of Play

The Rhine-Ruhr metropolitan region — Germany's largest conurbation — was characterised by contrasts and cultural diversity. The »City of Play« project took up this dynamic and accompanied the Rhine-Ruhr 2025 FISU World University Games in the run-up with a large-scale art and culture programme. In **Mülheim an der Ruhr, Duisburg and Essen**, an interactive network of installations, performances and urban interventions was created which connected sport, art and academia. Actions such as bicycle parades, performative boat tours and city explorations invited people to actively take part and to experience new forms of urban coexistence — playfully, creatively and collectively. In addition to the sporting competitions, student-athletes from all over the world had the opportunity to experience the cultural diversity and the impressive transformation of the region. The programme included visits to post-industrial landmarks such as former collieries and industrial parks that today serve as modern culture and innovation hubs. It was complemented by tours through sustainable urban development projects and academic institutions.

Vielfalt und Tradition. Sportland NRW — Exhibition

On the occasion of the Rhine-Ruhr 2025 FISU World University Games, the exhibition »**Vielfalt und Tradition. Sportland NRW**« at the Ruhr Museum on the Zeche Zollverein presented the history and diversity of sport in NRW with around 350 photographs, portraying the region as the heartland of German sport. The focus lay on historical developments, major sports festivals and prominent personalities.

FISU Games Neighbourhoods

Instead of a traditional student-athletes village, the concept of the so-called »FISU Games Neighbourhoods« was developed during the preparation phase for the international delegations and implemented temporarily in the host cities of Essen, Bochum, Duisburg, Berlin and Mülheim an der Ruhr. The Neighbourhoods functioned not only as retreat and meeting places for the international participants but were also intended to convey the spirit of the region. In terms of design, typical Trinkhallen elements of the Ruhr region were integrated into the temporary structures. At the info points, information on cultural highlights of the region could also be obtained.





Knowledge Management

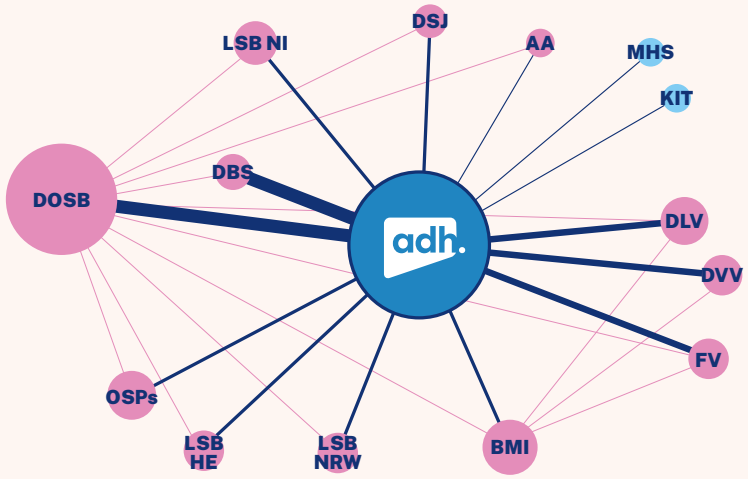
Already during the Games, an extensive »Observer Programme« was implemented to ensure the best possible knowledge transfer to future FISU World University Games hosts. Internally, process-accompanying reports from all functional areas were produced both before and after the Games. They were consolidated into a Final Report that provides an overall overview of all operational areas and thus supports long-term knowledge transfer.

EXCURSUS: INTERNATIONAL NETWORKING OF THE GERMAN UNIVERSITY SPORTS FEDERATION (ADH)

International networking represented a central driver for the sustainable development of university sports. The Rhine-Ruhr 2025 FISU World University Games offered a special opportunity to deepen existing cooperations and to build up new cross-border partnerships.

In particular, the adh was able to significantly expand its institutional anchoring as well as its network structures at national and international level in the course of the event. At national level, the relationships with key actors such as the German Olympic Sports Confederation (DOSB), the specialist federations and the National Paralympic Committee Germany (DBS) were intensified. Out of this grew a deepened substantive cooperation that increasingly went beyond formal structures and encompassed both sport-specific and inclusive topics.

Particularly noteworthy was the consistently pursued idea of inclusion, which was anchored in numerous projects and opened up new scope for joint initiatives, awareness-raising and participation. In addition, new cooperations with Landessportbünde emerged, through which the adh's connection to organised sport was strengthened and its national visibility significantly increased.



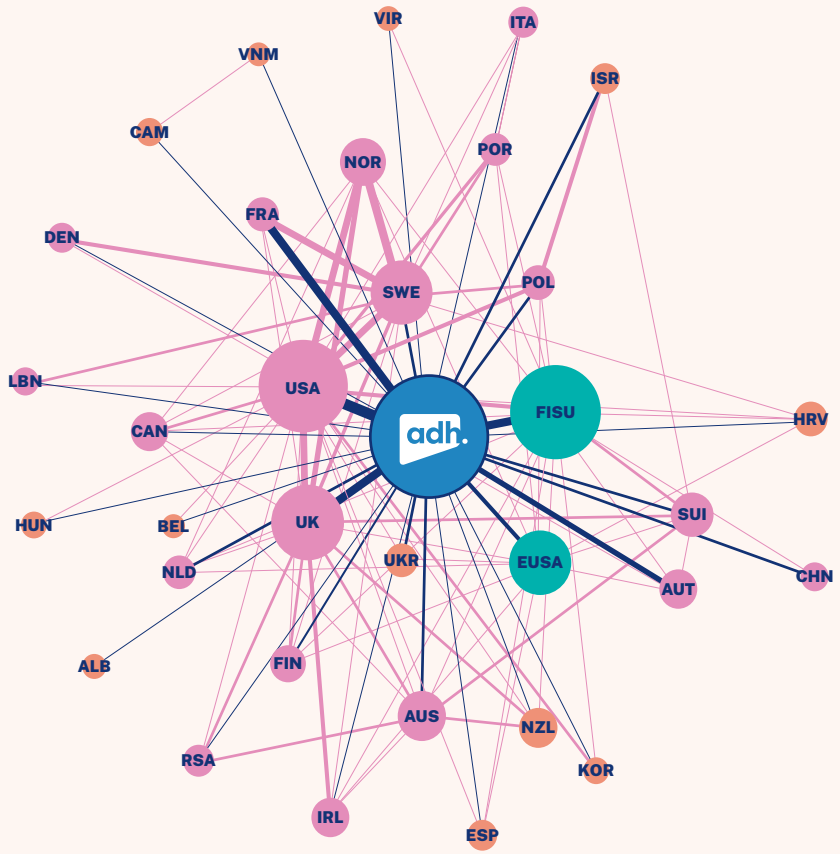
- **Organisations, institutions:** Deutscher Olympischer Sportbund (DOSB; German Olympic Sports Confederation); Olympiastützpunkte (OSPs; Olympic Training Centres); Landessportbund Hessen (LSB HE); Landessportbund Nordrhein-Westfalen (LSB NRW); Fachverbände (FV; professional associations); Deutscher Volleyball-Verband (DVV; German Volleyball Association); Deutscher Leichtathletik-Verband (DLV; German Athletics Association); Bundesministerium des Innern und für Heimat (BMI; Federal Ministry of the Interior); Auswärtiges Amt (AA; Ministry of Foreign Affairs); Deutscher Behindertensportbund (DBS; National Paralympic Committee Germany); Landessportbund Niedersachsen (LSB NI); Deutsche Sportjugend (DSJ)
- **adh:** Allgemeiner Deutscher Hochschulsportverband (German University Sports Federation)
- **Member universities:** Karlsruher Institut für Technologie (KIT); Mitgliedshochschulen (MHS)

The graphic shows the adh at the centre. The thicker the connecting line, the more intensive the exchange between the respective institutions. The larger a dot, the greater the importance of the institution for the adh. Since this is only a snapshot, it cannot be judged to what extent relationships had newly formed or consolidated. The representation nevertheless illustrates how the adh is embedded in the German sports system after the Games.

Furthermore, the 31 interviews of the study by Leon Hagenlocher (Master's thesis, Johannes Gutenberg-Universität Mainz) showed that the adh was also able to expand its cooperations with the National University Sports Federations (NUSFs) internationally by 63% (see Annex Methodology P). Existing partnerships — in particular with actors long and strongly anchored in university sports, such as the USA — were deepened, and new forms of bilateral knowledge and experience exchange were established. In this way, the Rhine-Ruhr 2025 FISU Games contributed substantially to strengthening international exchange processes in university sports and positioned the adh as a reliable actor in the global network.

In initiating new projects, the adh has so far acted predominantly as a committed and competent partner, without, however, itself taking the lead in setting new impulses for transnational cooperations.

Partnerships were discernible with the USA, the United Kingdom (UK), Austria (AUT) and France (thickness of the lines). There was also an intensive cooperation with FISU and the European University Sports Association (EUSA).



- **Organisations, institutions:** Fédération Internationale du Sport Universitaire (FISU); European University Sports Association (EUSA)
- **adh:** Allgemeiner Deutscher Hochschulsportverband (German University Sports Federation)
- **NUSFs:** countries according to ISO 3166 standard
- **Neue NUSFs:** countries according to ISO 3166 standard

The figure furthermore illustrates that more centrally placed representations were more strongly networked, while the thickness of the connecting lines depicted the intensity of the relationship between two institutions. As co-host, the adh was accordingly at the centre of the network.

Nearly all of the many NUSFs surveyed rated the effects of the Rhine-Ruhr 2025 FISU World University Games on their networks as positive. This underlines the lasting significance of the event for international university sports.

Hospitality and image of the Rhine-Ruhr metropolitan region

The results of the study on hospitality, on the »tops and flops« as well as on tourism-related locational factors painted, in the context of the Rhine-Ruhr 2025 FISU World University Games, an overall very positive picture of the Rhine-Ruhr metropolitan region (Master's thesis by Jonathan Ellies, Johannes Gutenberg-Universität Mainz). Both visitors and participants rated the Games and the offerings around them as enriching. The region was perceived as diverse and hospitable. This aspect was rated positively with M = 4.2 (scale 1–5) and influenced the intention to revisit accordingly favourably. International guests reported a stronger improvement of their image of the region than domestic respondents — presumably owing to lesser prior experience. With M = 4.1, the willingness to recommend the region to friends and acquaintances was also at a pleasingly high level.

In the qualitative feedback, the modern sports venues, the friendliness of the people and the respective cityscapes were named as highlights in particular. Isolated criticism related to traffic and transport, language barriers when finding one's way, as well as the high price level. These points did not, however, decisively impair the very positive overall picture. In total, the event thereby strengthened the image of the region as a hospitable and capable host of international sporting events (see Annex Methodology Q). At the same time, this fulfils a criterion of the Federal Government within the framework of the National Strategy for Major Sporting Events which argues in favour of hosting such events in Germany.

Regional contract awarding by the OC

In the awarding of its contracts, the OC gave particular consideration — within the possibilities of procurement law — to small and medium-sized enterprises (SMEs) based in the Rhine-Ruhr metropolitan region. Through this, competitive offers could be obtained, and a substantial share of the expenditures triggered by the Games initially remained in the region and did not flow off directly to external providers.

This regional procurement increased local value creation, since the commissioned companies in turn frequently spent their revenues again within the region — for wages, services, material purchases and subcontractor services. A portion of this income was subsequently spent regionally again by employees and businesses, for example on consumption, rents or investments. As a result, additional demand impulses arose which, via the so-called consumption multiplier, triggered further economic activity in the Rhine-Ruhr metropolitan region. Overall, this awarding strategy contributed to ensuring that the financial means did not only serve the short-term delivery of the event but also generated indirect follow-on effects and thereby stimulated the regional economy more broadly.

Share of regional suppliers, gastronomy businesses, art and culture professionals

The calculations on the economic sustainability of the Rhine-Ruhr 2025 FISU World University Games show that considerable financial means were channelled into the Rhine-Ruhr metropolitan region and took effect there economically. The regional economic cycle underlying the analysis encompassed all transactions resulting from tourism-related and participant-related consumption expenditures, revenues and expenditures of the OC, as well as subsidies and sports-venue investments by municipalities, the State of North Rhine-Westphalia and the federal state. All additional funds flowing into the region that ultimately benefited the population of the Rhine-Ruhr metropolitan region in the form of employment, income or additional tax revenues were taken into account (see Annex Methodology R).

Economic impact of the Rhine-Ruhr 2025 FISU World University Games on the Rhine-Ruhr metropolitan region

The economic impacts of the Rhine-Ruhr 2025 FISU World University Games were calculated exclusively for the Rhine-Ruhr area (Berlin was not included). The overall economic impact of the Games is therefore in total higher than shown in the following results. All financial flows taken into account were recorded in nominal terms (without inflation and without discounting) and relate to the period 2021 to 2028. The complex calculations (see Annex Methodology R) show that the Games triggered 193.3 million euros in expenditures in the Rhine-Ruhr metropolitan region. After adjusting for regional redistribution effects, own (regional) investments and the region's import quota, a regionally effective primary impulse of 147.4 million euros remained. Including the regional multipliers for the construction industry and consumption, an overall economic effect of around 196.4 million euros resulted for the period 2021 to 2028.

The overall economic effect of the Games for the Rhine-Ruhr metropolitan region was therefore clearly positive and also lay above the investments from tax revenues of the Federal Government and the State of North Rhine-Westphalia.

Triggered by …	Primary effect for Rhine-Ruhr in €	Overall effect for Rhine-Ruhr in €
OC	108.800.000	141.400.000
Investments	29.200.000	40.800.000
Consumption expenditures by tourists, student-athletes, volunteers, judges, etc.	9.500.000	14.200.000
TOTAL	**147.400.000**	**196.400.000**

The largest share of the economic impact was generated by the OC. This can be explained, among other things, by the fact that the delegations paid fees to the OC, which then centrally organised accommodation and catering. In addition, the expenditures of the OC unfolded economic activity over a period of around five years, while the tourism-related consumption impulse was predominantly limited to the approximately two-week event phase. Since the revenues originated largely from funds of the State of North Rhine-Westphalia, the Federal Government and from delegation fees — but were predominantly spent in the Rhine-Ruhr metropolitan region — the clear regional overall effect of EUR 141.4 million can be explained.

By comparison, the consumption expenditures of tourists and other groups appear at first glance smaller. This is, however, also due to the fact that central expenditure components — in particular for merchandising, tickets and the accommodation of the delegations — were included in the OC's budget and are therefore statistically not reported separately as tourism-related consumption expenditures.

The investments showed a smaller effect in the primary impulse than the net investments of 32.4 million euros would suggest. The reason for this is that municipal shares as well as the contribution of clubs were not counted as additional regional impulses in the regional-economic analysis. Imports of construction materials were also deducted for the overall effect. Ultimately, however, the investments generated 40.8 million euros of value creation in the Rhine-Ruhr metropolitan region.

The investments were borne by clubs, municipalities and the State of North Rhine-Westphalia. For the regional impact, however, only the subsidies of the State of North Rhine-Westphalia are relevant — in each case after deduction of the imported services — while the regional funds spent through the construction measures outside the region are also taken into account. In total, investments of 85.8 million euros resulted in a regional Rhine-Ruhr effect of 40.8 million euros.

The private consumption expenditures of tourists, student-athletes, delegates, judges, volunteers and media representatives — that is, all persons who did not reside in the Rhine-Ruhr metropolitan region (48.5% of all visitors) and travelled to the region exclusively because of the Games — led to an additional consumption impulse of 9.5 million euros. For student-athletes and other members of delegations, only the additional private expenditures were taken into account in this category. To this end, members of different nations were specifically surveyed. Occasional visitors (without entry ticket) as well as local residents from the Rhine-Ruhr metropolitan region were not included in the calculation.

To avoid double counting, strict care was taken to include only those privately incurred expenditures of delegations and volunteers that actually qualify as additional consumption expenditures. Ticket revenues and expenditures for merchandising were consistently not taken into account, since they were already included under the OC.

The primary impulse (first column) was amplified by regional multiplier effects (second column, induced effect) and had an effect on the regional economy via income and employment effects, since primary, newly inflowing funds were in turn spent. Indirect effects, on the other hand, were not included, such as private investments (for example in hotel renovations), festival and park visitors without entry tickets, as well as the consumption expenditures of visits for organisational purposes before and after the Games (for example FISU officials, delegation managers, the observers of the subsequent Games) and the costs of the bid for the Games.

In the pre-event phase as well as in the event year 2025, in particular the additional infrastructure investments in Bochum (stadium), Duisburg (regatta course) and Essen (tennis facility) as well as the expenditures of the Organising Committee unfolded positive economic effects of 67 million euros. A substantial amplifying factor lay in the fact that a large part of the contracts was awarded to regional companies. Also of long-term relevance are employment effects through those OC staff members who moved to the Rhine-Ruhr metropolitan region because of the Games and who are expected to remain there. 53% of the surveyed OC staff had moved to the region for the job. Of these, 62% planned to leave the region again after the end of the activity, but 18% planned to stay, and 20% were undecided. The corresponding consumption expenditures — and also the income taxes before the Games — are included in this economic impact calculation. In so far as the staff remain in the region after the Games, this is furthermore to be regarded as a Legacy for the region (young, qualified workforce).

During the Rhine-Ruhr 2025 FISU World University Games, the largest economic effect went back to the organisational activities of the OC, but above all also to the payment for the accommodation and catering of the delegations. In addition, the tourism-related expenditures of persons from outside the Rhine-Ruhr metropolitan region — as well as those of the media representatives and volunteers who had travelled in — brought a considerable consumption impulse. The clearly positive impact during the event period was caused above all by those guests who had travelled exclusively for the Rhine-Ruhr 2025 FISU Games and thereby brought additional, exogenous demand into the region.

In the post-event phase, only few funds were still spent. With the dissolution of the OC, however, the previously incurred expenditures continue to have an effect via multiplier effects for up to three years afterwards.

ECONOMIC IMPACT BY PERIODS

	Pre FISU Games (2021–2024)	FISU Games 2025	Post FISU Games (2026–2028)	Total (2021–2028)
Net impulse in million €	67,0	128,0	1,4	**196,4**
Additional regional tax revenues* in million €	2,0	3,8	0,0	**5,8**
Employment**	1.341	2.560	28	**3.929**

* It was conservatively assumed that 20% of the expenditures led to tax revenues and that only 15% of these remained as regional taxes within the Rhine-Ruhr metropolitan region..
** In employment years

For a productive region such as Rhine-Ruhr, both employment effects and additional regional tax revenues can be derived from such an impulse. General, non-sector-specific multipliers were deliberately used, since sporting events touch upon different sectors.

Since the calculation is consistently based on the regional Rhine-Ruhr perspective, the subsidies of the State of North Rhine-Westphalia and the Federal Government are to be regarded as exogenous inflows of funds into the metropolitan region, thereby increasing the regionally effective share of the expenditures. For the economic sustainability calculation, these state and federal funds were treated as additional financial flows, since they would not have reached the region without the Rhine-Ruhr 2025 FISU World University Games.

The expenditures of the Organising Committee for delivering the volleyball and swimming competitions in Berlin, as well as the expenditures of visitors in Berlin, were consistently excluded from the analysis. The values shown in the table therefore depict exclusively the economic effects for the Rhine-Ruhr metropolitan region.

5 ZOOM-OUT: LEGACY



5.1 INTRODUCTION

Legacy rarely shows itself immediately. The long-term effects of the Rhine-Ruhr 2025 FISU World University Games will only be able to be traced empirically in a clear way once today's impulses have passed over into stable behaviours, routines and structures. In the early phase after the event, this legacy can be grasped above all through future values: qualitatively discernible developmental tendencies that emerge from the measures implemented and point to possible long-term effects. They mark those moments in which awareness, competences and forms of cooperation begin to take root, and in which lasting outcomes and impacts gradually emerge from short-term outputs.

This Legacy chapter focuses on this process character. Along the five fields of impact — environment, economy, society, health and culture — it analyses which topic areas were initiated or accelerated by the Rhine-Ruhr 2025 FISU World University Games, which structural and cultural changes are emerging, and where first evidence of potentially sustainable further development is becoming visible. The analysis is guided by the »Zoom-in & Zoom-out« perspective on effects and Legacy developed in the Pre-Games Paper. Legacy is not understood as a concluded state but as an open transformation process, in which the momentum generated around the Rhine-Ruhr 2025 FISU World University Games is gradually translated into future action.

5.2 REVIEWING THE PRE-GAMES PAPER: FOUNDATION OF THE LEGACY UNDERSTANDING

The Pre-Games Paper laid the conceptual basis for the Legacy understanding of the Rhine-Ruhr 2025 FISU World University Games. It described Legacy not as a retrospective balance sheet but as **identification** as a future-oriented potential that emerges in interaction with societal megatrends and transformation processes. Under the Zoom-out perspective, five fields of impact were defined — environment, economy, society, health and culture — in which long-term developments can unfold. At the same time, it was shown that sustainability, human rights and Legacy are inextricably linked and only unfold their effect when measures remain connectable beyond the event period.

The Pre-Games Paper identified Legacy as a momentum that emerges from the combination of measures, local conditions, social dynamics, participatory processes and cultural impulses. The focus here was less on direct impact than on the systemic positioning of the Rhine-Ruhr 2025 FISU World University Games within long-term societal developments, as well as the question of which transformation spaces the event opens up. In line with this logic, the Pre-Games Paper describes Legacy as a future-oriented legacy that can only unfold its full effect in the years to come.



5.3 FRAMING FOR THE POST-GAMES PAPER

On this conceptual foundation, the Post-Games Paper now puts the question at the centre of which future values — and thereby which early forms of Legacy — are already becoming visible after the Rhine-Ruhr 2025 FISU World University Games. While the Pre-Games Paper developed the theoretical and strategic fields of impact, the Post-Games Paper analyses which impulses actually emerged, which approaches have been consolidated and which transformation processes have been set in motion. For all further elaborations, see Annex Methodology T.

THIS MARKS THE MOVEMENT:
FROM THE EXPECTED LEGACY (PRE-GAMES PAPER) →
TO THE OBSERVABLE EARLY LEGACY (POST-GAMES PAPER).

5.4 FIELDS OF IMPACT

5.4.1 FIELD OF IMPACT: ENVIRONMENT

In the Pre-Games Paper, the field of impact environment was positioned within the tension of global crises such as climate change, loss of biodiversity and ecological disruption. For the Rhine-Ruhr 2025 FISU World University Games, an expanded understanding of ecological responsibility was derived from this, one that reaches beyond resource-saving event management. Instead of mere renunciation, transformations, substitution solutions and systemic thinking stood at the centre. They shared the goal of setting ecological impulses that flow into long-term changes in behaviour, structural developments and institutional cooperations.

Consolidated cooperations and ecological effect pathways

Within the framework of the Wanda merchandising campaign, a species-protection contribution was generated that benefits peregrine falcon protection. For 30 years, the AG Wanderfalkenschutz of NABU NRW has been successfully campaigning for the preservation of the peregrine falcon population in NRW. The central Legacy lever lies in the continuability: the cooperation strengthened existing ecological infrastructures, increases visibility and reaches new target groups — and can thereby mobilise further support beyond the event.

Resources in cycles: RESTLOS x RR2025

The subsequent use of materials also shows how ecological principles were translated into concrete measures. Within the framework of the post-Games auction RESTLOS x RR2025, sports equipment, technology, furniture and equipment were passed on to local clubs and educational institutions. In this way, a twofold effect emerged: the infrastructure of non-profit sport was strengthened, while at the same time material resources were transferred into local usage cycles. This measure corresponds to zero-waste and reuse principles and marks a contribution to the development of circular-based infrastructures.

Energy, mobility and infrastructure in transition

Already in the Pre-Games Paper it was emphasised that ecological Legacy emerges where decisions influence long-term routines. In this sense, talks with municipalities about the use of renewable energies in event venues set important incentives. The examination and conceptual preparation of battery-supported back-up systems as an alternative to diesel-powered units likewise mark a concrete step towards low-emission infrastructure. These options open up scope for municipal follow-up projects and promote the principle »from renunciation to substitution« and, with it, the transition from fossil standards to climate-friendly alternatives.

In the area of mobility too, measures implemented can be recorded. Whether reliable new standards will develop from this in the long term, in regional traffic and environmental policy or in everyday mobility behaviour, cannot be assessed at the current point in time. Accordingly, these aspects are understood more as a space of potential than as independent, already secured future values.

Ecological awareness-raising and social norm formation

Numerous measures furthermore aimed at awareness-raising and social incentives. Programmes such as the Discover Route, in particular education around the topics of the 17 SDGs, deliberately sensitised young target groups and universities to local environmental topics. Seed-paper accreditations and other symbolically effective elements linked communicative impact with concrete action. Such formats strengthen educational institutions as carriers of an ecological future culture and can generate new expectations for future sporting events in the region, thereby influencing political and organisational decisions.

Early forms of ecological Legacy

In comparison with the transformation theses formulated in the Pre-Games Paper, first future values are emerging: the consolidated cooperation with environmental organisations such as NABU NRW in the area of biodiversity, the local strengthening of the circular economy through RESTLOS x RR2025, as well as the anchoring of ecological topics in educational institutions and target-group-specific formats — connected with the positioning of the Rhine-Ruhr 2025 FISU World University Games as a platform for urban sustainability. These developments stand exemplarily for what the Pre-Games Paper termed a »systemic ecological perspective«. They mark first forms of environmental Legacy, in which thinking in sustainable, substituting and consolidatable structures takes concrete shape, even if their long-term reach cannot yet be conclusively assessed from today's perspective.



5.4.2 FIELD OF IMPACT: ECONOMY

In the Pre-Games Paper, the potential of the Rhine-Ruhr 2025 FISU World University Games was emphasised to act as an economic catalyst and to initiate the transition to a future-capable »Next Economy«. By this is meant a form of value creation oriented towards long-term, networked and resilient structures. Through the targeted linking of local actors, start-ups, universities and international sports organisations, new cooperation models, knowledge spaces and innovation platforms were to emerge. The focus thereby lies not on short-term profit but on the building-up of sustainable structures and networks.

Tangible effects beyond the event

An analysis by Prof. Preuß shows that economic effects of the Rhine-Ruhr 2025 FISU World University Games can also be reported beyond the event year, for the period up to 2028. The calculations make clear that the Rhine-Ruhr 2025 FISU Games generate economic impulses which bring substantial added value to the Rhine-Ruhr region and point to long-term financial as well as structural effects.

Dual Career as an economically relevant field of action

Another impulse was set by the topic of »Dual Career«. Already in the run-up to the Rhine-Ruhr 2025 FISU World University Games, a specialist conference created first networking between Olympiastützpunkte (Olympic Training Centres), university sports and the DOSB. During the event, a research project on the compatibility of studies and elite sport was initiated together with the Universität Münster, whose results are expected in 2025. The adh is working with partners on sustainable solutions for the double burden of student elite athletes — a field of action with high potential for educational economics and talent retention.

Institutionalisation through the Rhein-Ruhr Legacy gGmbH

A central outcome of the economic Legacy is the founding of the non-profit Rhein-Ruhr Legacy gGmbH (as of: end of 2025). It takes over, on a long-term basis, the conception, planning and delivery of sporting, cultural and societal events. This includes the further development of the Ruhr Games as an interdisciplinary festival of youth and sports culture, as well as new formats such as the 3x3 German Pro Tour. Beyond that, the gGmbH establishes educational and networking formats, for example on promoting inclusion, sustainability and youth development. The close cooperation with universities, institutions and companies is an essential element for the regional anchoring and international visibility of urban sports formats. With initially four permanently employed staff members from the former Organising Committee of the Rhine-Ruhr 2025 FISU World University Games, a new economic structure emerges that creates employment and binds know-how.

Knowledge transfer as an economic lever

The economic effects also manifest themselves in the transfer of knowledge and personnel: around 70 staff members from the organising team moved on to planning teams of international events, among them the Olympic Games in Milan-Cortina and Los Angeles. This global network mindset not only secures jobs but at the same time exports standards developed in Rhine-Ruhr. At national level as well, leadership positions were newly filled. The former Senior Manager Science & Education, for example, now acts as a board member of the Deutscher Judo-Bund (German Judo Federation). It becomes visible here how knowledge from temporary event structures passes over into permanent institutions and effects change there.

Consultancy, material pass-on and resource use

A further aspect of the economic effect is the knowledge transfer that has begun: first consultancy activities for upcoming FISU World University Games in South Korea and North Carolina prove that the Rhine-Ruhr 2025 FISU Games are not only adapted, but that innovations are also being exported. This openness to knowledge-sharing strengthens the claim of a transformative event culture. In addition, material such as furniture or technology was specifically passed on to local clubs — a measure with ecological and economic benefit through longer usage cycles, shared resources and lower acquisition costs.

First signs of a resilient economic structure

The goals formulated in the Pre-Games Paper can thus be read off from concrete results. These include new potentials through the targeted promotion of the Dual Career, the institutional consolidation through the founding of the Rhein-Ruhr Legacy gGmbH, the know-how transfer through the move of specialists into international event organisations, as well as the strengthening of national federations through additional expertise, and the knowledge export into international contexts. In addition come economic effects through first approaches to sustainable resource use, for example through the passing-on of material into local structures.

At the current point in time, however, there are not yet robust data on the extent to which innovation ecosystems of the Rhine-Ruhr region have directly benefited from the Rhine-Ruhr 2025 FISU World University Games, or on whether spin-offs and new business models have developed from individual projects. The further unfolding of the economic Legacy depends, moreover, substantially on future funding structures, political decisions and the strategic orientation of central actors in the region, universities and sports organisations. Against this background, the developments outlined here mark not the end of a process but the beginning of a long-term effective economic transformation. They show that major events such as the Rhine-Ruhr 2025 FISU World University Games can be more than sporting highlights, namely platforms for structural renewal, economic resilience and a cooperative culture of innovation.

5.4.3 FIELD OF IMPACT: SOCIETY

In the Pre-Games Paper, societal transformation was described as a dynamic change of values, norms, identities and social relationships. The central assumption: major events such as the Rhine-Ruhr 2025 FISU World University Games can function as experiential spaces in which inclusion, diversity, participation and a new societal coexistence become concretely tangible. The development sought — away from an individualised society towards a cooperative, networked and diverse »we-culture« — was thereby regarded as the foundation for a long-term social Legacy.

First steps of implementation and structures

After the Rhine-Ruhr 2025 FISU World University Games, first developments can be identified that translate this vision into tangible future values. A particularly striking example of this is the Safeguarding and Awareness Concept, which during the Rhine-Ruhr 2025 FISU Games was part of the human rights and diversity strategy. Societal trends such as Universal Design, Gender Awareness or Multigraphy found their expression there, for example in the form of preventive structures, low-threshold reporting mechanisms and a culture of respectful coexistence. The concept is to be transferred to other major sporting events and will be applied at the World Games 2029 in Karlsruhe. This demonstrates the transferable structures and the long-term effect in establishing democratic, inclusive and safe spaces for encounter.

Inclusion as actual practice

Another milestone was the Rhine-Ruhr 2025 FISU Inclusion Summit, initiated by the adh and the State Chancellery of NRW. Within the framework of this meeting, an »Initiative Paper« was adopted which advocates the systematic dismantling of barriers in university sports, the integration of Para Sport into major events, and the structural involvement of people with impairments in planning and organisation. With the aim of making university sports a pioneer of practical inclusion, complementary qualification offers for those in charge, barrier-free infrastructure and communication, as well as academic accompaniment of inclusive measures are additionally demanded. This process was accompanied by Louis Kleemeyer, the Event Inclusion Manager of the Rhine-Ruhr 2025 FISU World University Games. Within the adh, the cooperation with the DBS was strengthened, among other things through inclusive training courses for preparation for the Winter and Summer editions of the FISU World University Games, in which students with and without disabilities prepared together for an international major sporting event for the first time. This line is being continued: for 2026, an international3x3 Wheelchair basketball tournament is planned in the Jahrhunderthalle Bochum. It is to be delivered by the Rhein-Ruhr Legacy gGmbH and will integrate a German University Championship in 3x3 Basketball and 3x3 Wheelchair basketball.

Encounter as a motor of societal change

The Rhine-Ruhr 2025 FISU World University Games showed how international and culturally diverse encounters make societal change immediately tangible. Formats such as festival areas, campus events, the Discover Route or the cultural programme became spaces of discourse and resonance in which people with different backgrounds, identities and life realities came together. According to the contact hypothesis of Gordon Allport (1954), under certain conditions — such as equal status, shared goals and a supportive framework — contact between groups can lead to the reduction of prejudices. International sporting events create these conditions in concentrated form: in an emotionally positively charged atmosphere, student-athletes, spectators and visitors meet on equal terms.

Atmospheric effects with long-term impact

Even if such atmospheric effects are difficult to quantify, they can be grasped as central future values. They enable resonance, mutual learning and visibility of marginalised groups — factors that can normalise inclusive behaviour and social practices over the long term. A social Legacy thus emerges not only through concrete measures but also through cultural experiences and emotional connectedness.

Voluntary engagement as social dynamic

Studies by Prof. Preuß in the area of volunteering prove first societal effects already quantitatively. The engagement of the volunteers was characterised by strong personal values and high intrinsic motivation, which in many cases led to an increased willingness to engage voluntarily in the future as well. Many first-time volunteers too experienced their participation as very positive; aspects such as sense of community, team orientation and a high emotional sense of belonging were emphasised. These dynamics can be regarded as central indicators for a sustainable culture of engagement.

Co-individualisation and new we-culture

The Rhine-Ruhr 2025 FISU World University Games thereby laid the foundation for new forms of co-individualisation. Through intercultural encounters and collective experience, spaces of experience were created that counteract fragmentation and instead promote cooperation, participation and inclusion.

Future values and societal Legacy

From the discernible transformation pathways, several central future values can be derived: a transferable awareness and protection concept with role-model character; the revitalisation of international sports culture and social participation through modernised infrastructure; the strengthening of inclusive norms through diversity and encounter; as well as the formation of a new we-culture through respectful, collective community-shaping. These developments mark first but central steps towards a societal Legacy. A development towards a culture of togetherness, inclusion and active participation that can unfold impact beyond the event, but whose long-term reach cannot yet be conclusively assessed today.



5.4.4 FIELD OF IMPACT: HEALTH

The Pre-Games Paper set the thematic framework by positioning health as a societal key resource. It is understood not only as an individual goal but as a collective precondition for participation and future-capable ways of living. In this expanded understanding, major sporting events such as the Rhine-Ruhr 2025 FISU World University Games were not only to provide impulses for physical activity but to act as catalytic platforms to integrate health more strongly into education, everyday life and politics. The focus thereby lay on the shift from a performance-centred logic towards an inclusive, preventive and mentally health-promoting culture.

Structural anchoring: The FISU Healthy Campus Label

A central example of this strategic course-setting is the expansion of the FISU Healthy Campus Label to nine German universities. Through the cost-free participation in the certification process, an institutional lever was created that anchors the topic of health durably within the university system. The visibility of the programme, underlined by a certificate award at the FISU World Conference, does not remain merely symbolic. More decisive is the continuation: the adh accompanies the universities actively until the External Audit 2026. In this way, a long-term developmental process is initiated that promotes structural resilience and health-oriented university cultures.

Mental health as a guiding theme

A further impulse unfolds in the content orientation of the FISU World Conference, which positioned mental health as a central topic. In view of increasing mental strains — reinforced by the after-effects of the COVID-19 pandemic — the topic was addressed with scientific precision and societal urgency. International experts and high-profile student-athletes contributed to its relevance and public perception. More than a symbolic effect resulted: impulses arose for strategic anchoring within university leadership, a deeper engagement within university sports, and an expanded societal discourse. The normalisation of mental health outlined in the Pre-Games Paper takes concrete shape here, as a new standard in health-related institutions and mission statements.

Practiced health: Experiential spaces beyond the programme

In addition to the programmatic measures, the Rhine-Ruhr 2025 FISU World University Games themselves acted as spaces of resonance, in which health was not only thematised but actively experienced. In the connection of sport, academia and social interaction, hybrid learning and encounter formats emerged that made health tangible as a collective field for shaping. It is precisely these social microspaces — in which volunteers, students and other actors acted together — that show how a culture of health emerges through performative practice: not as a moral prescription but as experienced self-efficacy in togetherness.

Impact proven: Health impulses in everyday life

That these impulses do not remain without consequences is proven by the impact analysis of Prof. Preuß. More than a third of those surveyed who took part in physical activity offerings during the Rhine-Ruhr 2025 FISU World University Games reported an increased awareness of health and an increased motivation towards a health-oriented lifestyle. This quantifiable effect indicates that the field of impact health did not remain limited to programmatic content but passed over into everyday action.

Outlook: Field of impact health

As a result, several strands of development can be identified that give concrete shape to the transformation potential outlined in the Pre-Games Paper: the institutional anchoring through the Healthy Campus Label, the strategic thematisation of mental health, and the social tangibility in formats of encounter mark central future values. Health was thereby not only staged in the short term but integrated as a cross-cutting theme into structures, discourses and processes of development.

The Rhine-Ruhr 2025 FISU World University Games show exemplarily how sport-based major events can contribute to the emergence of a more resilient, health-oriented society, and can thereby unfold impact far beyond the event moment.



5.4.5 FIELD OF IMPACT: CULTURE

The Pre-Games Paper understood culture as a field of impact in which societal transformation, identity formation and global-local (»glocal«) interactions become particularly visible. The central approach was that international encounters, cultural programmes and hybrid knowledge formats can create spaces of resonance that promote a cosmopolitan mindset, shared identity and glocal processes of innovation. Culture was thereby conceived not as a decorative accompanying programme but as a strategic lever for strengthening openness, networking and belonging.

Cultural dynamics in the context of global sporting events

Cultural processes arise where perception, meaning, identity and exchange intermesh. International major events open up spaces in which different perspectives, narratives and forms of expression become visible and, through this, allow new patterns of interpretation to emerge. In this sense, the Rhine-Ruhr 2025 FISU World University Games formed a space of resonance that linked global influences with local contexts, promoted glocal exchange processes and released manifold cultural impulses.

Glocal impulses and spaces of resonance

To examine these developments more closely, a sample survey was conducted among the partners of the cultural framework programme. The resulting picture — not representative but indicative — points to various cultural shifts. Some of those involved report new contacts, perspectives and impulses for their own programmes. Others emphasise that certain formats could be tried out in an international setting for the first time. At the same time, uncertainties were articulated, for example regarding the consolidation of individual approaches or the lack of structural points of connection. These ambivalences mark the transition into a phase of cultural transformation in which resonance does not run in a linear way but in waves.

Narrative openings and media visibility

Without doubt, the Rhine-Ruhr 2025 FISU World University Games set strong narrative and communicative impulses. The increased media presence — through journalistic reporting, new visual languages and heightened public visibility — expanded the cultural perception of university sports. This symbolic charge generated a momentum that has already set first follow-on processes in motion, for example in the form of deepened dialogues with higher-education-policy actors. In perspective, it is emerging that the role of university sports within the cultural fabric of academia, sport and education could be redefined.

Digital participation and new forms of storytelling

Transformation processes were also initiated in the digital sphere. The social-media initiative »Local Heroes« established a glocal narrative mode in which local identities — such as volunteers, Team Studi members or active university-sports actors — were embedded in a global sporting frame. This gives rise to a mode of collective participation that does not merely depict cultural identity but actively shapes it. The continuation of this practice in other event formats points to the potential of new cultural routines, whose consolidation will only take concrete form in the further course.

Rebranding and visual realignment

Another cultural impulse lies in the rebranding of the corporate design of the adh. The visual realignment opens up not only new aesthetic spaces of self-positioning but at the same time strengthens the recognisability of university sports as an independent cultural actor. The planned further use of existing materials in the sense of sustainable upcycling lends this redesign an additional symbolic dimension: the expression of modernisation combines here with a reflective approach to resources and points to future-oriented organisational cultures.

Interdisciplinary encounters as cultural drivers

Cultural impulses also became visible within international and interdisciplinary exchange formats. Programmes such as »Adopt a Delegation«, various knowledge and media formats, or the cultural framework programme enabled encounters in which different perspectives, forms of expression and identities could meet. In these spaces, moments of conversation, negotiation and mutual inspiration arose.

Infrastructure as a cultural carrier

Cultural meaning ultimately also unfolds where infrastructure is symbolically charged. The modernisation of the tennis facility of ETUF e. V. in Essen and the related possibility of hosting international tournaments open up new narrative points of reference for sports culture. Such places function — beyond their core function — as cultural markers and as interfaces between tradition, renewal and global embedding.

Outlook: Field of impact culture

In the overall picture, a Legacy becomes visible whose lines are only gradually becoming denser: the growing visibility of university sports, new narrative practices, design impulses in communication, glocal exchange formats and symbolically condensed places of sporting encounter mark a complex transformational event.

Beyond the region, the Rhine-Ruhr edition also has an effect within the governance of international university sports: FISU has adopted the »Zoom-in & Zoom-out« Legacy perspective developed in the Pre- and Post-Games Paper as a blueprint for the conceptual design of future FISU World University Games. Legacy is thereby considered more strongly than before, as a shapeable dimension, already in the planning phase.

In the sense of a sustainable Legacy, the long-term effect of these processes cannot yet be conclusively assessed today. Nevertheless, this opens up potentials for new cultural routines, identity-formation processes and forms of communication that could position university sports in the future as an active co-shaper in the cultural sphere.



LEVER

LEVER

SUSTAINABLE DEVELOPMENT GOALS								
SUSTAINABILITY TOPICS	ENERGY	MOBILITY	RESOURCES	COMPETITION VENUES	MOVEMENT / HEALTH	EDUCATION / ENGAGEMENT	DIVERSITY	VALUE CREATION / NETWORKING
ASPIRED GOALS	Electricity procurement from renewable energy sources	Promote low-emission means of transportation and travel options	Highest possible rent, reuse and recycling rates	Organisation of sports and non-sports events in existing and modernised sports/ event venues	Creating enthusiasm for exercise, sport and health	Active participation and involvement of students and universities	Creating participation and an event experience for as many people as possible	Promoting the attractiveness of the Rhine-Ruhr metro-politan region as a business location
MEASURES & PROJECTS								
LEVER MEASURES & PROJECTS	VENUE-POWER CHECK	FREE PUBLIC TRANSPORT & CYCLE BONUS	REUSE OF SPORTS & EVENT EQUIPMENT, WATER STATIONS & CIRCULAR BACKSTAGE CATERING PROGRAMME	MODERNISATION OF SPORTS FACILITIES	SPORTS DIPLOMA & PROMOTION OF FISU HEALTHY CAMPUS	RHINE-RUHR ET AL. (2025) & FISU YOUNG SPORTS MEDIA TALENTS	TANDEM- VOLUNTEER PROGRAMME & INCLUSIVE SERVICES	CALL FOR PARTICIPATION & APP DEVELOPMENT
SUBTRENDS	POST-CARBON	ROAD DIET	ZERO WASTE	SPORTIVITY	HOLISTIC HEALTH	OPEN-KNOWLEDGE	UNIVERSAL DESIGN	COOPETITION
LEGACY IMPACT	ENVIRONMENT: The Rhine-Ruhr 2025 FISU Games offers the opportunity to promote environmental action and sustain-ability through practical solutions without apportioning blame.	ECONOMY: Synergies are crucial for a sustain-able economic legacy that focuses on responsibility and future orien-tation rather than short-term profit.	HEALTH: A comprehensive understanding of health that goes beyond individual health and pursues a systematic, community-oriented health goal.	SOCIETY: Opening up spaces for discourse and implementing ideas strengthen civil society and democracy for an inclusive and respectful future.	CULTURE: From closed system to open cosmopolitanism: this creates an inclusive culture that combines global and local aspects and leaves a legacy.			
MEGATRENDS	CLIMATE CHANGE	CONNECTIVITY	URBANISATION	HEALTH	DEMOGRAPHIC CHANGE	INDIVIDUALISATION	GLOBALISATION	

6 OUTRO

The sustainability and human rights work carried out in the context of the Rhine-Ruhr 2025 FISU World University Games made clear that sustainability management and the generation of positive, lasting Legacy effects were recognised as an important factor and addressed through many measures. This was often not the case at earlier major sporting events. This positive change should be maintained and must be further expanded.

The positive development at the Rhine-Ruhr 2025 FISU Games was reflected in a large number of good-practice measures that systematically combined ecological, social and economic objectives. At the same time, however, it also became apparent that the implementation of ambitious sustainability and human rights standards under the conditions of limited temporal, personnel and financial resources was associated with considerable challenges. Sustainable thinking and action in sport therefore remains an essential future task and a joint effort that in the future must be pursued even more consistently, in a more structured way and over a longer term.

Despite these framework conditions, numerous of the set goals could be achieved. In particular, the consistent use of existing sports venues contributed substantially to an environmentally sound delivery of the event. In parallel, modernisations at selected locations generated not only infrastructural effects but also social and economic added value. Furthermore, the integration of public transport as well as the principle of short distances supported a low-emission event concept and strengthened the claim to address mobility as a relevant lever in the sustainability management of sporting events.

In the social and human rights area, the measures implemented — for example inclusive services as well as comprehensive safeguarding and awareness structures — were predominantly perceived positively by participants and visitors. In these sensitive areas, the event proceeded without any concerning incidents. These results are, in particular against the background of the growing international expectations regarding integrity, protection concepts and human rights-based governance in sport, to be regarded as a substantial achievement.

At the same time, it became clear that there is still a need for development in several topic areas, in particular in environmental sustainability. For example, the integration of renewable energies (focus area 3) as well as the promotion of cycling mobility are to be further expanded in the future. Focus area 4 (resource conservation and waste management) proved particularly demanding. Although responsible guiding principles such as »rent rather than buy«, the seed-paper day pass as a zero-waste measure or the innovative Ecomasse project in Venue Dressing set some important and in part very effective impulses, it was, due to complex organisational structures and heterogeneous local framework conditions, not possible to establish a uniform waste-separation system across all competition sites. Sustainable procurement also remained a central area

of tension, since the cheapest solution was in practice frequently not the most sustainable. In the future, greater efforts should therefore be made to avoid short-term production cycles and — for example with a clearer focus on fair-trade aspects, material origin and life-cycle costs — to implement the principle of »quality over quantity« consistently. In individual areas this already succeeded very well, in particular in the handling of the OC's office furniture and computers.

With regard to methodology and evaluation, the Rhine-Ruhr 2025 FISU World University Games likewise set important accents. Through the first-time application of the »Zoom-in & Zoom-out« framework as well as the conduct of an ecological and economic impact study, an innovative approach to assessing the sustainability and the effects of the Rhine-Ruhr 2025 FISU Games was established. This procedure enabled both an in-depth analysis of individual measures and an overarching classification of their ecological, social and economic effects. Particularly noteworthy is furthermore the participatory character of the evaluation process, which was carried out, among other things, through numerous student theses. This approach was complemented by extensive data collection in the field: in total, more than 8,000 visitors and participants were approached and surveyed within the framework of the Games, made possible by the dedicated involvement of more than 60 trained interviewers (students and awareness volunteers). Building on these experiences, in the future in particular the data basis, the monitoring processes and the institutional anchoring of sustainability at sporting events should be developed further, in order to document impact orientation not only selectively but to secure it reliably and comparably over the long term.

At the same time it must be emphasised: Legacy is rarely immediately visible. The developments documented in the post-Games analyses can at the current point in time be described above all as future values and early tendencies. They show which topics were initiated or accelerated by the Rhine-Ruhr 2025 FISU World University Games and at which points connectability for long-term effects has emerged. Precisely from this, however, a central precondition follows: in order for these early impulses actually to be assessed as Legacy in a few years, central reference points must be collected again and systematically followed up. Without recurring measurement points, consistent data bases and clearly defined responsibilities, there is the risk that momentum is indeed described but cannot be verified as long-term effect.

At the same time, Legacy does not realise itself automatically. Projects and approaches that are to produce lasting outcomes and impacts need targeted support, accompaniment and suitable governance structures. Resources for consolidation, partnership-based assumption of responsibility as well as monitoring and learning processes that continue beyond the event period are required. Only if this »follow-on architecture« succeeds will it become visible in some years which developments have stabilised and which are then to be classified only as primarily temporary output effects.

From the insights, clear recommendations can be derived for future major events:

1. **Define the framework:** In the respective context, it should be precisely clarified how the FISU World University Games, or the responsible organisation, can contribute at local as well as global level to achieving the UN Sustainable Development Goals (SDGs).

2. **Anchor sustainability in structures:** Sustainability should be systematically integrated into project and organisational management and strategically anchored at the leadership level (top-down).

3. **Use sport as a driver of sustainable development:** Sport can serve as a platform to promote sustainable behaviour and to achieve long-term effects. However, this only succeeds if sport itself credibly embodies what it demands of others.

4. **Ensure credibility:** Sustainability and human rights must not remain a mere commitment but must be reflected in concrete actions, decision-making processes and responsibilities.

5. **Make impact measurable:** Tangible impact should be documented through measurable initiatives, transparent communication and regular, traceable reporting.

The Rhine-Ruhr 2025 FISU World University Games showed that major sporting events can be organised more sustainably even under challenging conditions. At the same time, the implementation made clear that responsible organising only succeeds when sustainability is pursued consistently, teamwork functions, and setbacks or political positioning do not lead to a loss of strategic direction. Particularly relevant are early-stage planning and the consistent anchoring of sustainability guidelines in tenders as well as in negotiations with all partners. Beyond that, targeted persuasion of the host cities is required, so that the Games are not only understood as an event but as an opportunity for Legacy that can be actively used.

At the same time, it became clear that it was not possible in all areas to move external actors to the desired depth of sustainable transformation. For example, it was not possible to mobilise universities in Germany — and not even those in the region — significantly more strongly to create new and modern infrastructural physical-activity offerings for students. Nevertheless, at some universities it was possible to advance the FISU initiative for Healthy Campus in Germany on a larger scale.

For Rhine-Ruhr it became apparent that the FISU World University Games, with responsible budget management, consistent use of existing infrastructures and overall moderate investments through renovations, were able to contribute to an economically positive result for the region. Employment effects were triggered, municipal tax revenues were generated, and an overall economic impulse was created that exceeds the level of the public investments.

The insights gained form a valuable basis for future FISU World University Games as well as for major sporting events in Germany overall. They set important impulses for more sustainability in and through sport and at the same time make clear that economic sustainability can be achieved. Nevertheless, sustainability is to be understood less as a short-term »project« than as a long-term organisational task. It places high demands on continuous steering, sufficient resources, sustainable partnerships and institutional capacity to learn. Whether and to what extent long-term Legacy will emerge from the developments set in motion can only be shown with certainty when the initiatives are consistently continued, structurally supported, and evaluated again in the coming years.






FISU GAMES
NEWS SERV
WORLD
UNIVERSITY
GAMES


FISU WORLD UNIVERSITY GAMES


FUNKY
MÜNSTER


FISU
WORLD
UNIVERSITY
GAMES
SUMMER






GER

METHODOLOGY

METHODOLOGY OF THE MAIN QUESTIONNAIRE (A)

Questionnaire design

The questionnaire was designed as a bilingual online survey (German/English). It began with language selection as well as a consent and information section explaining, among other things, the purpose of the study, data-protection aspects and the participation prerequisites (at least 16 years old and participation in the Rhine-Ruhr 2025 FISU World University Games as a visitor or accredited person).

In terms of content, the survey followed a modular structure. At the beginning, central screening and structural variables were collected, in particular the participation status (visitor or accredited person) and, for accredited persons, additionally the accreditation category (for example volunteer, media, delegation, technical official). These entry questions subsequently steered the further paths via exclusion conditions (»hidden if…«), so that participants saw only the question blocks relevant to them and the processing time was reduced.

The questionnaire consisted predominantly of closed questions. Dominant were rating scales and item batteries, among others on the perception of sustainability across five dimensions (ecological, economic, social, health-related, cultural), collected via a five-point Likert scale from »not sustainable« to »sustainable«. Complementarily, single-choice and multiple-choice questions were used (for example ticket purchase yes/no, selection of particular ticket types, modes of transport used), as well as frequency scales (for example use of modes of transport on site).
A further focus lay on tourism- and expenditure-related information, for example on trip planning, overnight stays and expenditures, in order to carry out the economic analysis (see Methodology R: economic sustainability). For this, numerical inputs were used in part, including a preceding currency selection. Selectively, open questions were also integrated.

In addition to the main part, supplementary modules were deployed within the framework of the survey. The background was that several Master's theses on specific sub-aspects of sustainability in the context of the Rhine-Ruhr 2025 FISU World University Games were prepared and additional topic-related items were required for these. These additional questions were not collected in separate surveys but attached as add-ons directly to the main part of the questionnaire. In this way, the core questionnaire remained identical for all respondents, while additional question blocks were shown depending on topic relevance and target group.

The supplementary modules encompassed various topic areas, including anti-discrimination, social cohesion and intercultural exchange, health promotion, as well as aspects of waste avoidance, waste separation and recycling. Further modules related to locational impacts or participation and physical-activity offerings. Complementarily, specific question blocks were developed for staff members of the Organising Committee, participants of the FISU World Conference, volunteers and members of delegations.

Below follows an overview of the data collected from the individual sub-questionnaires (cleaned returns):

Nr.	Questionnaire	Number [n]
01	Main part of the questionnaire (sustainability, economy, ecology)	1.079
02	Main part + anti-discrimination, social cohesion and intercultural exchange	808
03	Main part + health promotion, waste avoidance and recycling	559
04	Main part + locational impacts and Discover Route	379
05	Main part + volunteers	287
06	Main part + promotion of physical activity	97
07	Main part + World Conference	48
08	Main part + delegation	18
	Total	**3.275**

To ensure transparent documentation and to enable the reproducibility of the study, the detailed codebook was published online and made freely accessible (link: https://www.sportoekonomie.uni-mainz.de/files/2026/01/Codebook_FISU_JGU_2026.pdf). The document represents the complete technical and substantive specification of the online questionnaire used and served as the central reference for the traceability of all evaluations presented in the report.

In the codebook, all questionnaire components are systematically documented, including the exact question wording in the German and English language versions, the associated variable names, answer categories and codings, as well as defined missing values. In addition, all filter and hiding conditions (skip logics), the assignment to visitor and accreditation groups and the question paths based on them are explicitly indicated. In this way, it is traceable in detail which participant groups saw which questions and under which conditions individual questions were shown or hidden.

Distribution strategy

For the data collection, a deliberately practice-oriented distribution strategy strongly geared to personal presence was implemented. Experiences from earlier event surveys in the context of major sporting events were incorporated. The research group was on-site throughout the entire event period and actively involved in the conduct of the survey. This continuous presence enabled a flexible steering of the data collection as well as the direct approach of different target groups.

A central pillar of the distribution strategy was the involvement of the OC's official Awareness Volunteers. They were trained in detail in advance to support the survey and equipped at all event venues with flyers, which were also integrated into the official Welcome Package. In total, around 5,000 DIN A6 flyers made of recycled and environmentally friendly paper were used. The research team sought daily personal exchange with the volunteers in order to sensitise them to the survey, clarify open questions and pass on up-to-date hints on how to approach people.

In addition, 10 Master's students were involved in the data collection, who were writing their theses on different sustainability topics of the Games. They were therefore particularly motivated. Each person worked with their own QR code, so that individual returns could be traced. This approach eased the steering of the data collection and at the same time fostered a positive spirit of competition within the group.

Complementarily, around 10 further volunteers were deployed at Beach volleyball in Duisburg, who were enrolled in the Bachelor's programme »Sport & Sportwissenschaften« in Mainz. This group likewise used its own QR code. As additional motivation, a simple performance-based incentive system was introduced, in which joint leisure activities could be unlocked depending on the number of completed questionnaires. In this way, the group, among other things, earned a joint bowling evening with pizza and drinks.

Parallel to the data collection, the incoming data were continuously evaluated in order to systematically steer the further course of the survey. On the basis of these live evaluations, volunteers and students could be specifically directed to certain places or visitor groups that had so far been underrepresented in the value structure (consumption pattern). In particular towards the end of the survey period, this approach proved decisive, for example in order to specifically approach international participants for the analysis of the economic impact.

To flank the on-site data collection, daily updates were shared via a WhatsApp group. Within this framework, the students informed one another about current return numbers, motivated each other and shared successful strategies for approaching visitors. This continuous internal

communication contributed substantially to maintaining motivation and securing the high level of engagement throughout the entire data-collection period. At the FISU World Conference as well, the questionnaires (main and conference-specific questionnaire) were visibly placed, among other things through an announcement in the official programme, references on presentation slides, the use of flyers as well as personal approach and networking on site.

For harder-to-reach target groups, creative approaches were also specifically used. Student-athletes, for example, were personally approached and invited to participate in the survey in the lobby of the delegation hotel in Bochum as well as in the athletes' mensa in Essen. In some cases, they were also verbally guided through the survey. In addition, the survey was broadcast including QR code on the large info screens of the sports venues during game or sport breaks (among others at Beach volleyball in Duisburg, 3x3 Basketball in Bochum as well as Basketball in Essen or Hagen). For this, it was essential that some of the interviewers had accreditations in order to initiate these measures.

The qualitative survey by the Mainz research team in the form of a questionnaire with open questions showed that in particular a friendly, personal and situation-appropriate approach was decisive for the successful distribution of the survey. Particularly effective proved to be the specific approach of visitors in waiting or break situations. Above all, these included phases between individual competitions, waiting times at food stands, stays around sanitary facilities as well as encounters at the bicycle wash station.

Complementarily, short and transparent information on the purpose of the survey fostered the willingness to participate, for example references to one's own Master's thesis or the relevance of the results for future major sporting events. The emphasis on the short processing time, the anonymity of the information as well as a concrete added value — in particular with regard to the evaluation and improvement of sustainability and environmental aspects — also proved motivating. Less successful, on the other hand, was a purely functional approach without a conversational entry, for example simply handing over a QR code. The prospect of winning a prize also did little to increase willingness to participate.

From the volunteers' perspective, differences in approach and willingness to respond between German and international visitors additionally emerged. Several volunteers reported a greater openness and spontaneity of international guests, who often showed themselves more enthusiastic and less often refused directly. German visitors, by comparison, more frequently appeared reserved or sceptical. At the same time, it became clear that successful communication strategies varied depending on the target group: among German visitors, in particular the reference to the

region, to their own interests (for example a sporting biography) as well as to a possible Olympic bid by the Rhine-Ruhr metropolitan region worked in a motivation-fostering way. Among international guests, on the other hand, the usefulness of the survey for the event itself or for FISU could be emphasised above all. Overall, these feedback items underscored the importance of a flexible and target-group-specific approach as a central success factor of the distribution strategy.

Sample description

At the same time, it became clear that successful communication strategies varied depending on the target group: among German visitors, in particular the reference to the region, to their own interests (for example a sporting biography) as well as to a possible Olympic bid by the Rhine-Ruhr metropolitan region worked in a motivation-fostering way. Among international guests, on the other hand, the usefulness of the survey for the event itself or for FISU could be emphasised above all. Overall, these feedback items underscored the importance of a flexible and target-group-specific approach as a central success factor of the distribution strategy.
Sample description

For the present study, a total of 7,964 persons were reached within the framework of an online survey. The data collection took place during and after the Rhine-Ruhr 2025 FISU World University Games. The sample is based on a self-selection procedure or a convenience sample, since participation was voluntary. This may come with limitations regarding the representativeness of the results. Participants were predominantly invited to take part through targeted personal approach by students and staff and could open the questionnaire by scanning a QR code.

Participants had to be proficient in the German or English language in order to answer the questions. In addition, a minimum age of 16 years as well as participation in the Rhine-Ruhr 2025 FISU World University Games as a visitor or as an accredited person was required. Before the actual evaluation, a multi-stage data cleaning process was carried out in order to ensure the quality and comparability of the data collected.

	Sample size	Number removed	Reason
Initial	7.964	0	
Cleaning 1	3.927	4.037	Not started (drop-out before language selection)
Cleaning 2	3.293	634	Drop-out in the socio-demographic section (citizenship, place of residence, gender)
Cleaning 3	3.275	18	Causally-logically incorrect entries (among others for ticket costs or declared expenditures)

For the economic analyses, all entries in foreign currencies were homogenised to euros. 1 August 2025 was set as the reference date for the conversion. The exchange rates used were based on data from Google Finance, which aggregates information from Morningstar, ICE Data Services and Refinitiv.

The sample size remained unchanged in this step, since all respondents had made plausible entries in the currency indicated in each case. Complementarily, for a few data sets without an explicit currency indication, provided that consistent information on place of residence and citizenship was available, the missing currency information was supplemented accordingly.

On the basis of the complex distribution strategy and subsequent cleaning, a robust data set emerged, the composition of which is presented in more detail below. The evaluation for this Post-Games Paper was predominantly descriptive. The focus lay on the systematic processing and presentation of the data collected, in order to make central patterns (value structures), distributions and interrelationships within the sample visible. This approach enables a transparent classification of the results, composed as follows:

Criterion: **Visitor status** (n = 3.275)

Category	Number [n]	Share [%]
Visitor	1.773	54
Accreditation	1.197	37
Missing	305	9

Criterion: **Gender** (n = 3.275)

Category	Number [n]	Share [%]
Male	1.532	47
Female	1.689	52
Non-binary	14	< 1
No answer	40	1

Criterion: **Place of residence** (n = 3.275)

Category	Number [n]	Share [%]
Berlin	150	5
Rhein-Ruhr	1.835	56
Germany	784	24
Abroad	506	15

Criterion: **Age** (n = 3.275)

Category	Number [n]	Share [%]
66+	187	6
61–65	218	7
56–60	254	8
51–55	235	7
46–50	190	6
41–45	226	7
36–40	232	7
31–35	311	9
26–30	510	16
21–25	602	18
< 21	280	9
No answer	30	1

METHODOLOGY OF THE FURTHER QUESTIONNAIRES (B TO T)

B) n = 94 staff members of the OC; Marvin Knab (Master's thesis, Johannes Gutenberg-Universität Mainz). The age group of 26- to 30-year-olds was the most strongly represented with 36%. Of 91 persons, 63% were female, 36% male and 1% non-binary. 73% were German citizens and 87% resident in Germany. With regard to contract type, 71% were permanently employed, 16% worked as interns and 13% were employed under further contract forms. 83% held an academic degree (Bachelor's and/or Master's).

With regard to prior experience in OCs of sporting events, 37% indicated that they had no experience, while 30% reported more than three comparable activities.

53% of the respondents had moved to the Rhine-Ruhr metropolitan region for the job. Of these, 62% planned to leave the region again after the end of the activity, 18% planned to stay, and 20% were undecided.

The questionnaire on social cohesion was developed in a theory-guided way. The basis was the mapping of the five dimensions of the SERVQUAL model to the five components of social cohesion according to Lukas et al. (2021).[16] Building on this, the items were contextually adapted to team cohesion. Complementarily, selected items from the Bielefeld social-capital index (network and values capital) were integrated and adapted linguistically.[17] All items were collected on a five-point Likert scale (1 = do not agree at all, 5 = fully agree). Additionally, the team-building measures offered were assessed with regard to their contribution to social cohesion via a ranking of the five most important measures (1 = most important, 5 = least important).

The collection of national pride was based on the German version of the »National Identity III — ISSP 2013« questionnaire.[18] For measuring sporting pride, two sport-related items from general and specific national pride were combined.[19] As a comparison dimension, the shortened scientific pride served.[20] The items were collected on a five-point Likert scale (1 = not proud, 5 = proud). Complementarily, it was collected whether the activity in the OC had influenced attitudes or feelings towards Germany.

C) The perception of sustainability was surveyed across five dimensions (cultural, health-related, social, economic, ecological). Answers could be given between 1 (completely not sustainable) and 5 (completely sustainable), while the value 3 stood for »neither/nor«. The visitor sample for this questionnaire (n = 1,252) comprised visitors from the Rhine-Ruhr metropolitan region (n = 890), from other German federal states (n = 261) and from other countries (n = 101). All five sustainability perceptions show mean values above 3 in all of these subgroups. The perceptions of cultural, health-related and social sustainability are relatively homogeneous across the three subgroups of the visitor sample. The perceptions of economic and ecological sustainability, on the other hand, vary more strongly between these groups. Here, visitors from abroad show a more positive perception than visitors from the host region and from other parts of Germany. The sample of accredited persons was divided into five subgroups: internal and external members of the OC (n = 100), FISU and OC family (n = 61), delegated participants and judges (n = 170), media representatives (n = 19) and volunteers (n = 658). A similarly homogeneous distribution was observed for the perceptions of cultural, health-related and social sustainability across these five groups. The perceptions of economic and ecological sustainability, however, varied considerably between the groups. In particular, the internal and external members of the OC showed the least positive sustainability perceptions and lay below the neutral value 3. Nevertheless, the perceptions of economic and ecological sustainability were clearly higher in all other subgroups.

D) The focus of the ecological impact analysis lay on the determination of the ecological footprint of the Rhine-Ruhr 2025 FISU World University Games. The CO2 footprint calculation took place with professional accompaniment by and with the support of two female students from Eberhard Karls Universität Tübingen and The Hague University of Applied Sciences, who were involved in data analysis before and after the Games. The method used in this report to calculate the emissions is based on the methods and principles of the »Greenhouse Gas Protocol Corporate Accounting and Reporting Standard«. According to First Climate, the emission factors are based on scientifically recognised, regularly updated data sources such as IEA, the British Department for Energy Security and Net Zero as well as the French ADEME. Certain uncertainties of the calculated values exist. The basis of the methodology is the internationally recognised »Greenhouse Gas (GHG) Protocol«, developed by the World Resources Institute and the World Business Council for Sustainable Development.

Data basis and data collection

The data required for the CO2 accounting were generated within the framework of a holistic collection approach. In addition to already available data from the main questionnaire described in Methodology A, additional information was collected in cooperation with the OC. For this, standardised templates for CO2 accounting were developed and transmitted to the internal functional areas (FAs) of the OC. To ensure data quality and applicability of the templates, a test phase was carried out until April 2025. The final data collection took place until August 2025 on the basis of the feedback from the FAs. All data sets were prepared such that they are compatible with the calculation tool of First Climate.

System boundaries

A central step of the CO2 footprint calculation is the definition of the system boundaries. For this Post-Games Paper, the CO2 footprint of the sporting events was primarily considered. Cultural events were included when, due to shared event venues or integrated ticketing structures, a clear-cut assignment of emissions was not possible.

Analogous to the methodology of the 2012 London Olympic Games, a distinction was made between three levels of responsibility:

- **Own emissions** are caused by activities that are entirely financed by the OC and directly managed by it (for example internal operations or the procurement of goods and services).
- **Shared/prorated emissions** arise through activities that are financed or carried out jointly with partners, for example the operation of event venues or the transport of officials and participants.
- **Associated emissions** result from activities that are clearly connected with the Games but lie outside direct financial control, such as the arrival or accommodation of visitors.

Associated sources were only taken into account when their relevance was considerable and reliable data were available. This principle led to the exclusion of certain emissions that were indeed connected with the Games but either marginal or too complex for a quantification.

Methodological differentiation by fields of action

Use of existing sports and event venues
The data basis of this chapter is exclusively based on the information from the functional areas of the OC. The data were evaluated descriptively and served the classification of potential emission effects in the context of the use of existing infrastructure.

Low-emission mobility solutions
The calculation of the mobility-related emissions represented the methodologically most complex part of the analysis. All participant groups (visitors, accredited persons, volunteers) were included in the analysis. In principle, a distinction was made between the arrival and departure of the participants as well as on-site mobility.

(1) Arrival and departure
Due to the strongly varying use of modes of transport, a further differentiation by geographic travel starting points was carried out. The following subgroups were distinguished:

- International travellers from outside Europe
- International travellers from within Europe
- Travellers from Germany outside the Rhine-Ruhr metropolitan region
- Travellers from the Rhine-Ruhr metropolitan region
- Travellers from Berlin (BER)

Within these subgroups, a uniform calculation approach was applied. The goal was the determination of a total distance (TD) per mode of transport and subgroup. For this, the total number of travelling persons (N) was multiplied by the distance covered (D). The determination of the number (N) was based on the raw data of ticket sales. In a first step, the share of the respective subgroups was determined. In a second step, these values were extended by a multiplier mapping the average share of accompanying persons per ticket buyer. This multiplier was determined in a differentiated way on the basis of the results of the main questionnaire and distinguished between international travellers (2.13 accompanying persons) and travellers from Germany (1.71 accompanying persons).

The distance determination (D) was carried out taking into account a threshold of 1,000 kilometres. Above this distance, an exclusive arrival by plane was assumed. Below this limit, the percentage use of different modes of transport was taken into account on the basis of the questionnaire data — differentiated by country or federal state.

For the calculation of the geographic distances, the following assumptions were made. (1) For flights, Düsseldorf Airport (DUS) was defined as the destination airport. (2) For all other modes of transport, a reference point within the city of Düsseldorf was set. The distance calculation was carried out using the Haversine formula and was conducted — depending on subgroup — at the level of countries (capitals), federal states, as well as within the Rhine-Ruhr metropolitan region on the basis of aggregated postcode areas.

(2) On-site mobility

The calculation of on-site mobility basically followed the same methodological approach. Complementarily, in this step it was required to determine the number of days of stay per person. This was derived via the average number of overnight stays per person collected in the main questionnaire. On this basis, the individual duration of stay could be integrated into the calculation.

The daily distance covered per person was set at a flat rate of 13 kilometres. This assumption was based on the average distance between the event venues. The total distance of on-site mobility resulted from the multiplication of the number of persons, the determined duration of stay (in days) and the daily distance. Finally, the total distance was differentiated on the basis of the percentage distribution of the modes of transport used on site collected in the questionnaire, to enable a mode-specific allocation for the CO2 accounting.

Renewable energy sources

The data basis of this chapter is based on the information from the functional areas of the OC. The data were evaluated descriptively and served the classification of potential emission effects in connection with energy consumption as well as the use of renewable energy sources.

Resource-conserving procurement and waste management

The data basis of this chapter is based both on the information from the functional areas of the OC and on supplementary information from the main questionnaire. The data collected were analysed descriptively. In this way, in addition to structural and process-related information on procurement and waste organisation, user-related assessments and behavioural data could also be taken into account.

E) n = 559; Clara Wübbeke (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data in the area of waste and resource management at the FISU World University Games.

F) n = 559; Anthony Walter (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data in the area of health promotion through sporting participation offerings and health-related workshops at the FISU World University Games.

G) n = 97; Sebastian Malburg (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data in the area of promotion of sport participation through the FISU World University Games.

H) n = 4 qualitative interviews and membership analysis; Niels Richter (Master's thesis, Johannes Gutenberg-Universität Mainz): content analysis of the qualitative interviews and analysis of membership data in the area of long-term effects of the FISU World University Games on club memberships in Rhine-Ruhr and Berlin..

I) n = 808; Malte Kippenhahn (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data in the area of anti-discrimination at the FISU World University Games.

J) n = 808; Sebastian Ramspott (Master's thesis, Universität Bayreuth): descriptive analysis of Likert-scale data in the area of intercultural exchange at the FISU World University Games.

K) n = 520; Kristin Fischer (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data in the area of identification and national awareness at the FISU World University Games.

L) n = 48; descriptive analysis of Likert-scale data on the conference Competing for Change: Exploring Sustainability and (Mental) Health.

M) The results were based on a standardised online survey of n = 240 volunteers of the Rhine-Ruhr 2025 FISU World University Games, carried out three months after the event. The sample comprised 51% female, 48% male and 1% non-binary volunteers. In total, 50% were married, 43.5% single and 6.5% gave no answer. 50% of the respondents had no children. The average age was 50.9 years (min. = 18, max. = 81). The educational level was overall high: 54% held a (university of applied sciences) higher-education degree, 31% held (subject-specific) Abitur and 15% held a Realschulabschluss or lower. 61.7% of the respondents lived in NRW.

The questionnaire used had already been deployed at the Special Olympics World Games 2023 and subsequently developed further.[21] Satisfaction with the volunteer activity was collected via a seven-point Likert scale (1 = not satisfied at all, 7 = fully satisfied). The motivation of the sport-event volunteers was measured with the Volunteer Motivation Scale for International Sporting Events (VMS-ISE).[22] For this, an extended version with 41 items on 10 motivational dimensions was used, among them expression of values, interpersonal contacts, personal development, love of sport, career orientation as well as extrinsic rewards. The adaptation and validation of the extended scale were tested.[21] All motivation items were likewise rated on a seven-point Likert scale (1 = not at all applicable, 7 = fully applicable).

The intention for future voluntary engagement was captured through nine items mapping different forms of engagement within and outside sport (Likert scale: 1 = strongly decreased, 7 = strongly increased). Complementarily, the individual volunteer history of the respondents in 24 areas of sport and further societal fields was queried for the period before and after the event. For already existing engagement, additional information on scope and duration was collected, as well as on whether this engagement was attributable to the activity within the framework of the Rhine-Ruhr 2025 FISU World University Games. In this way, an individual volunteer history could be mapped for each surveyed person.

The attractiveness of sport-event characteristics was surveyed via 11 items mapping specific features, for example the temporal limitation of the engagement. The items were developed on a theoretical basis, analysed separately, and rated on a seven-point Likert scale (1 = not at all attractive, 7 = very attractive).

N) n = 6 qualitative interviews; Justin Torrez (Bachelor's thesis, Johannes Gutenberg-Universität Mainz): content analysis according to Mayring of the interviews with first-time volunteers in the area of motivation and entry experiences of first-time volunteers at the FISU World University Games 2025.

O) n = 379 and expert interviews; Mehdi Al Madani (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data and qualitative interviews with facilitators in the area of education, using the example of the Discover Route at the FISU World University Games.

P) n = 31 and n = 4 expert interviews; Leon Hagenlocher (Master's thesis, Johannes Gutenberg-Universität Mainz): content analysis according to Mayring for the evaluation of the expert interviews and network analysis based on the data of the questionnaires on the Rhine-Ruhr 2025 FISU World University Games. The graphic only showed the interviewed university sports federations, organisations and programmes. Missing nations, organisations or programmes therefore did not mean that these were not also part of the network.

Q) n = 379; Jonathan Ellies (Master's thesis, Johannes Gutenberg-Universität Mainz): descriptive analysis of Likert-scale data and qualitative free-text answers on highlights and flops in the area of locational impacts of the FISU World University Games.

R) Investigated were the economic impacts of the Rhine-Ruhr 2025 FISU World University Games on the economy in the Rhine-Ruhr metropolitan region. The aim was to determine whether the societal welfare benefit of the Games exceeded the costs arising in the Rhine-Ruhr metropolitan region. Methodologically, a demand-side (Keynesian) impact analysis was carried out on the basis of multiplier effects, which is regarded as an established procedure for estimating short-term economic impulses.

The calculations covered the period 2021 to 2028, with the greater part of the effects arising in the years 2024 and 2025. For this reason, discounting and inflation adjustment were dispensed with. All positive effects (benefits or inflows of funds) and negative effects (costs or outflows of funds) triggered by the Rhine-Ruhr 2025 FISU World University Games were systematically recorded and assessed.

The analysis was based on a very extensive data collection designed for this purpose. Among other things, surveys on the consumption behaviour of visitors, volunteers, student-athletes and coaches, media representatives and conference participants, databases on ticketing and volunteer management, all of the OC's balance sheets, as well as all information on the construction and investment activity of the municipalities flowed in. Methodologically, a representative consumption pattern (value structure) was determined for each visitor group, and this was then multiplied by the number of the group size (volume structure). The 11 consumption patterns thus derived, empirically determined from n = 3,275 surveys, were therefore multiplied by the number of accreditations or ticket sales available at the OC (via which the number of visitors was determined).

At the centre stood a welfare analysis that took into account exclusively the net benefit for society but not benefit effects for the private sector, individual industries or the OC. The study design combined for this elements of the logic of economic impact studies and was guided by Keynesian basic assumptions of demand-side impulse effects. A central precondition of the modelling was a consistent delimitation of effects. Costs were defined as FISU-World-University-Games-related outflows of funds from the Rhine-Ruhr metropolitan region, benefits as FISU-World-University-Games-related inflows of funds, in particular through exogenous/autonomous means (for example international consumption demand or subsidies of the State of North Rhine-Westphalia). Expenditures whose origin lay in the region and which also remained within the region were treated as redistributions and therefore did not enter the balance as additional economic effect (for example local visitors). For structuring, the effects were distinguished between direct (via surveys and balance-sheet analyses) and induced effects (via multipliers). Indirect effects were not modelled, through which the results tended rather to be underestimated. Intangible effects such as image gain or improved networking were treated separately in other chapters of the Post-Games Paper.

The primary impulse in the consumption area was determined on the basis of extensive surveys (n = xxx). For this, target-group-specific consumption patterns were derived and strict attention was paid to the principle of fund inflow or redistribution. The primary impulse through investments could be precisely determined on the basis of the financial and implementation data available. In this, it was likewise systematically verified whether funds from outside flowed into the region and whether they were subsequently also spent regionally. Fund shares that were indeed regionally initiated but spent outside the Rhine-Ruhr metropolitan region entered the calculation accordingly as an outflow of funds.

The primary impulse thus determined (balance of fund inflows and outflows of the Rhine-Ruhr metropolitan region) formed the basis for the derivation of the overall economic effects, on which the induced effect was then calculated via multipliers. Despite the processing of all available information, the modelling here was based on a forecast model, since central parameters on regional multipliers, consumption and investment quotas as well as municipal tax effects were not fully available in region-specific form for the Rhine-Ruhr metropolitan region and therefore had to be derived from literature values as well as comparison regions. Not included were redistributions as well as effects of a consumption vector changed by the Games or of an altered consumption quota. Against this background, in particular employment and additional tax effects were deliberately assumed conservatively. The results shown must therefore be interpreted as a lower bound and tend to be underestimated. This ensures that the values reported in the Post-Games Paper were achieved as minimum effects with high robustness.

On the basis of model calculations of GWS GmbH Osnabrück with the INFORGE/SPORT model, the following assumed key figures projected onto the Rhine-Ruhr metropolitan region emerged:

The consumption multiplier of 1.3 was plausible for the Rhine-Ruhr metropolitan region, since a high share of the expenditures was to be attributed to tourism-related services (hotel, gastronomy, transport, leisure) and essential inputs (labour, transport services, regional services) were predominantly provided regionally. Through the involvement of many regional partner businesses as well as small and medium-sized enterprises, lower outflows of capital were to be assumed. A larger share of the funds flowed into regional wages, local supply chains and trades. The investment multiplier of 1.4 corresponded to a typical regional value. In the construction sector, multipliers frequently lie above 1, since value creation and employment arise to a high degree locally and wages pass over into local consumption in the short term. According to information from the OC, refurbishment measures were primarily implemented by regionally based firms. This resulted in a high regional share in trades, planning and logistics, despite in part imported materials, which was likewise taken into account and counted as an outflow of funds.

The employment multiplier related in particular to tourism-induced effects. With 20 employment years per million euros of economic activity, this corresponded arithmetically to one employment year per 50,000 euros of economic impulse. Of the customary average tax revenue, which lay at around 20% of the expended economic impulse, only 15% were assumed to be municipal taxes, so that only 3% of the economic impulse had flowed into the region and took effect as municipal tax in the municipalities. The remaining 17% went to the Federal Government and are not shown in the Post-Games Paper. The detailed methodological derivation is documented in Preuß et al. (2009).

S) n = 38 volunteers from the environment of Johannes Gutenberg-Universität Mainz, who were surveyed in writing about their observations and conversations during the Rhine-Ruhr 2025 FISU World University Games. The aim of this qualitative complement was to systematically capture perceptions from the field (among other things from direct interactions with visitors and participants) and to gain additional hints on the effect, visibility and acceptance of the measures implemented, in particular in the sustainability context..

T) The future values were compiled and evaluated from different sources. Both quantitative and qualitative methods were used.

Decisive were above all those developments that showed themselves as consistent in content and condensed semantically in contexts of meaning, narrative patterns or shared interpretations as well as in concrete processes, structures or narratives.

Since the evaluation was only possible until the end of 2025, the results are to be understood as first assessments. They show which changes are emerging, without already determining how strong or lasting they will be in the future.

TREND GLOSSARY

Beyond Plastic
Initiatives to reduce plastic waste and develop plastic-free products.

Corporate Health
The increasing importance of health in companies and in the workplace, both physically and mentally.

E-Mobility
The spread of electric vehicles as an environmentally friendly alternative to conventional combustion engines.

Economy for the common good
This form of economy focuses on the wellbeing of society and the environment as a whole, not just on financial profit.

Gender Awareness
means developing an understanding of and sensitivity to gender issues in order to contribute to a more equal and fairer society.

Glocalisation
The merging of global and local aspects, whereby global influences are integrated into local contexts.

Green Tech
Technological innovations to reduce environmental impact and promote sustainability in various areas.

Holistic Health
A holistic approach to health that integrates the physical, mental and social aspects.

Collaboration
The focus here is on cooperation between different players, often across industry boundaries, to achieve common goals.

Last Mile Concepts
Innovative approaches to optimising the last mile of logistics to increase efficiency and reduce environmental impact.

Quality of life
The desire for physical and mental satisfaction and the longest possible health span.

LGBT+
stands for lesbians, gays, bisexuals, transgender people and other sexual and gender minorities. The aim is to promote the rights and acceptance of these people and to combat discrimination.

Lifelong Learning
Continuous, lifelong education and training, which is essential in an ageing society and a rapidly changing world.

Multigraphy
In contrast to a biography, which is traditionally characterised by demographic data such as age, gender or ethnicity, multigraphy emphasises the diversity of lifestyles.

Open Innovation
An innovation approach based on open collaboration and the sharing of ideas.

Open Knowledge
Free access to knowledge and information as well as their shared use and further development

Plant Based
The trend towards plant-based alternatives, which is gaining importance beyond nutrition in material sciences and consumer goods.

Playfulness
The term refers to the integration of playful elements into various areas of life and work in order to promote creativity and commitment.

Post-carbon
Approaches to reducing dependence on fossil fuels and supporting renewable energies.

Post-growth
A movement that advocates sustainable, environmentally friendly forms of economic activity instead of continuous economic growth.
Preventive Health
Focusing on preventive measures to avoid illness.

Resonance
The pursuit of a living relationship between the individual and his world.

Responsive City
Cities that respond to the needs and feedback of their residents and adapt dynamically.

Road Diet
Concepts for reducing road traffic and promoting alternative means of transportation such as bicycles or public transport.

Sharing Economy
An economic model based on sharing and joint use of resources.

Sense economy
This economic view emphasises the importance of meaningful work and products that are valuable for both individuals and society.

Social Business
A social business is a company that primarily pursues social or ecological goals instead of maximising profits.

Sportivity
The growing awareness of sport and exercise in society is reflected in a 21st century attitude to life. This does not necessarily imply physical activity, but reflects all aspects of the discourse.

Start-Up Culture
This culture is characterised by innovation, agility and a willingness to take risks - typical of young, growth-oriented companies.

Touchless Tech
Technologies that enable health interactions without physical contact, for example, through gesture control, digital applications.

Transparency
The disclosure of information and processes, which promotes trust and understanding.

Ungendered Lifestyle
stands for a lifestyle that transcends traditional gender roles and norms. It is about the freedom to express and live individual identities and preferences beyond gender stereotypes.

Universal Design
aims to design products, environments and systems in such a way that they can be used by all people, regardless of age, ability or other factors. It is about accessibility and user-friendliness that ensure broad accessibility and usability.

We-culture
Break with traditional social categories. Formation of flexible, often temporary and informal federations of individuals based on shared interests and values, whereby diversity is seen as a strength and individual identities can be preserved.

Zero Waste
Strategies for avoiding or significantly reducing waste.

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DECLARATION OF PRINCIPLES

FOR RESPECTING HUMAN RIGHTS AND SUSTAINABILITY AT THE RHINE-RUHR 2025 FISU WORLD UNIVERSITY GAMES

PREAMBLE

Rhine-Ruhr 2025 FISU Games gGmbH („organiser“) was founded in 2021 as the Organising Committee for the Rhine-Ruhr 2025 FISU World University Games („event“). From 16 to 27 July 2025, around 8,500 student athletes and officials from up to 150 nations will compete in the host cities of Bochum, Duisburg, Essen, Mühlheim an der Ruhr, Hagen, and Berlin. The Rhine-Ruhr 2025 FISU World Conference and the Rhine-Ruhr 2025 Festival are also central non-sports programme items of the event. This declaration confirms the responsible organisation of the event. As part of this event, the organiser commits to respecting and protecting human rights. In addition, the organiser recognises the United Nations 2030 Agenda and the principle of strong sustainability and commits to implementing sustainability measures in the course of the event. .

1. PRINCIPLES AND VALUES

This declaration is based on the Universal Declaration of Human Rights (UDHR) and other international and national human rights standards and agreements. The organiser commits respecting human rights in the organisation and delivery of the event in line with the UN Guiding Principles on Business and Human Rights. The aim is to treat all people with respect and to enable participation in the event free from discrimination.

The organiser also commits to implement sustainability measures. The understanding of sustainability is based on the principle of strong sustainability and sustainability measures are orientated towards the 17 Sustainable Development Goals of the United Nations (SDGs).

Internal participation processes have developed core values that apply, in particular, to cooperation between internal employees and serve as a basis for partnership-based cooperation with the German University Sports Federation (adh), state institutions and other stakeholders:

Appreciation, cohesion, courage, flexibility, and transparency.

2. RESPONSIBILITY TO RESPECT HUMAN RIGHTS

Promoting sustainability, diversity and social cohesion is firmly anchored in the event‘s mission statement. In addition, the sustainability strategy developed with participation ensures systematic and target-orientated planning and implementation of sustainability measures.
A human rights risk analysis was conducted to identify human rights risks in the organisation and delivery of the event, taking into account in particular the following groups of people: women, children, the LGBTQ+ community, people of colour, religious and cultural minorities, people with disabilities, athletes and officials, visitors, employees, volunteers, and journalists. The risk analysis identified **the following six priorities for the human rights work:**

(1) Integrity, legality, safety and security:
A comprehensive security concept, compliance with European data protection standards, and targeted internal training ensure the protection of human dignity and safety in line with relevant human rights of all those involved in the event.
(2) Violence, abuse, and discrimination and
(3) equality, diversity, accessibility, and inclusion:
All forms of (online) interpersonal violence and abuse (including physical, psychological, and sexual) and discrimination (such as cultural, racial, ethnic, gender-specific, religious or structural) are opposed. Accessibility measures ensure participation, while a comprehensive awareness concept recognises the special protection needs of children, women, the LGBTQ+ community, people of colour, religious and cultural minorities and people with disabilities and ensures that all forms of discrimination, violence and abuse are actively combated.
(4) Working conditions:
Labour standards and the rights to fair wages and safe, inclusive working conditions are strictly adhered to and actively promoted. Clear contractual regulations ensure that fair working conditions are also guaranteed for external service providers and everyone in the supply chain.
(5) Freedom of assembly, freedom of expression, and freedom of the press:
The rights to freedom of assembly, freedom of expression and uncensored reporting are respected and actively supported. The official accreditation procedure guarantees access to the event for journalists and further supports the protection of press freedom.
(6) Health and Well-being:
Emergency medical supplies and personnel will be provided at all sports venues and event locations. These will be supplemented by awareness-raising measures and programmes to promote health and well-being for all participants.

The organiser commits to an effective implementation of these human rights measures in cooperation with all partners and stakeholders involved, in particular the German University Sports Federation (adh) and state institutions.

3. SUSTAINABILITY AND HUMAN RIGHTS IN HARMONY

A responsible approach to the natural environment and natural resources is an integral part of the event organisation and contributes to the protection of the human rights of future generations. The organiser commits to implement the event in a socially just and environmentally friendly manner. The organiser implements sustainability measures that contribute to the SDGs.

4. ZERO-TOLERANCE TOWARDS DOPING AND MATCH-FIXING

Compliance with the competition rules and fair play are essential elements of sport. The organiser has a zero-tolerance attitude towards breaches of the law and breaches of duty, in particular doping and match-fixing.

5. IMPLEMENTATION AND MONITORING

Training and awareness-raising measures are carried out for all employees to ensure the effective implementation of human rights and sustainability measures. The results of the human rights risk analysis and the sustainability strategy, including measurable targets and a continuous optimisation process, form the basis for the implementation of this declaration.

6. COMPLAINTS MECHANISM AND REMEDY

An internal and external reporting system ensures that complaints and violations are dealt with promptly and appropriately and that access to remedy is supported. This complaints management system effectively complements the due diligence process and ensures that the event is both compliant with human rights and implemented sustainably.

7. PARTICIPATION AND CO-OPERATION

The organiser works closely with academics in human rights and sustainability as well as further (local) civil society actors and affected persons in order to ensure continuous monitoring, co-design and a participatory optimisation process with regard to the measures. The organiser attaches particular importance to transparent communication and actively involves relevant interest groups in decision-making processes in order to jointly implement and achieve human rights and sustainability standards, measures and objectives.

8. REPORTING OBLIGATION

The organiser is committed to transparent reporting. A comprehensive information sheet, and pre- and post-Games papers ensure open communication on organisational topics and transparently present measures and successes in the areas of sustainability and human rights.

Niklas Börger
CEO

Rhine-Ruhr 2025
FISU Games gGmbH

Jörg Förster
Chair of the Board

German University
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