ERA SUSTAINABILITY REPORT 2025

REPORT BY ECENT

LEADING EUROPEAN NEPHROLOGY

EXECUTIVE SUMMARY

With 9,857 people on site (incl. Staff) and 657 online participants, the ERA Congress 2025 in Vienna marked a significant milestone in the European Renal Association's commitment to sustainability. This report provides a comprehensive analysis of the event's environmental and social performance, including a CO_2e report, and evaluates progress made since the previous year, identifying key areas for future improvement. The most ambitious initiative of the congress was successfully pursuing the Austrian 'Green Meetings' certification, a significant undertaking that signalled a clear strategic intent and served as a catalyst for numerous positive changes across the event's operations.

This commitment by ERA to sustainability has yielded tangible and measurable results. Compared to the previous year, per-person emissions rose by around 12.58% (4.69% with exactly same methodology and data points as in 2024), reflecting the stronger international participation from visitors outside Europe and highlighting opportunities to further enhance sustainable travel initiatives. Despite this overall increase, significant reductions were driven by the more central European location, which facilitated lower-impact travel and transport emissions within Europe, as well as the substantially lower carbon footprint of accommodation in Vienna, and greater efforts by ERA regarding sustainability. Notable advancements were made in communication, with the addition of a dedicated sustainability section to the website, and in the exhibition, where waste was reduced by 60% through clearer guidelines and the launch of the 'Sustainability Industry Challenge'. Furthermore, the complete elimination of single-use dishware in catering represents a significant advancement. However, there are also critical challenges. Significant operational inconsistencies became apparent, particularly in catering, leading to substantial food waste, as well as in on site waste management for exhibitors. Attendee feedback further highlighted this issue: while participants praised the overall intention, they want ERA to prioritise sustainability more broadly (94.6%). The lessons learned in 2025 thus provide a clear and actionable path forward, and it is imperative that the positive momentum is maintained.

KEY FIGURES

Set Up	1st to 4th of June 2025
Congress	4th to 7th of June 2025
Dismantling	6th to 7th of June 2025

Participants	6,668 On Site / 657 Virtual
Exhibitors	1,424
Speakers	1,364
Setup crew	200
Staff	200
Total On Site	9,857
Total	10,514

METHODOLOGY

The Event Carbon Footprint is determined using the Greenhouse Gas Protocol as its foundation. The methodology involves identifying and quantifying all relevant emission sources across the stages of preparation, implementation, and post-event processes. For this specific emission factors were used. Overall, data availability for calculating the event carbon footprint of the 62nd ERA Congress 2025 is solid, with many emission sources already well-documented. However, data remains limited in specific areas.

A detailed overview of data availability for each aspect of the event carbon footprint calculation is provided below:

- **Mobility:** Really good data based on the information provided by participants and the team in the registration form and an estimate for setup personnel of the booths.
- **Accommodation:** Average nights per person calculated based on Interplan bookings. Distribution of private and hotel accommodations derived.
- **Catering:** Detailed menus and planning quantities are available for all catering organised by ERA. A good overview of the exhibitor catering was provided. Estimates based on the number of participants were provided for catering outside the venue.
- **Transport:** Information on means of transport available for randomly selected approx. one third of exhibitors, extrapolations for the rest. Distances determined from samples with exhibition stand constructors.
- **Materials:** Detailed data is available and was provided for all the materials by ERA, estimates based on the Sustainability Challenge, inspections on site and conversations with the booth builders.
- **Preparation:** Detailed numbers were provided for the travels of the team and estimated for the exhibitors (e.g. site visits).
- **Location:** Detailed data is provided by the Austria Center Vienna (ACV).
- **Waste:** Data on on site food waste is not available; waste generation in other areas has been provided by the ACV.
- **Digital:** Information on the number of emails, website clicks, and virtual participation was fully available.

AUTHORS

As a qualified industrial engineer with a master's degree in finance and information management, Kilian Osberghaus possesses a deep understanding of the complex interconnections between ecology and economy. He focuses on innovative solutions that unite sustainability with economic efficiency, thus enabling significant reductions in emissions.

Julian Hirschmann has been committed to environmentally friendly business practices for many years. His extensive experience in the field of applied sustainability, his degree in physics and his commitment to environmental responsibility make him your ideal partner for well-founded and future-oriented reports. He accompanies a wide range of partners on the path to greater sustainability – in the short term for individual events and in the long term over many years.

EVENT CARBON FOOTPRINT

Figure 1:

Allocation of emissions to the different emission sources.
This report expresses values in CO_2 equivalents (CO_2e), encompassing the impacts of water vapor, methane (CH4), nitrous oxide (N2O), and other greenhouse gases, thereby accounting for total greenhouse gas emissions.

Travel Emissions		**Share of Emissions**
Mobility	22,325.946 t CO_2e	98.77 %
Accommodation	278.00 t CO_2e	1.23 %

Emissions Excluding Travel		**Share of Emissions**
Catering	170.01 t CO_2e	33.59 %
Transport	116.23 t CO_2e	22.96 %
Materials	111.64 t CO_2e	22.06 %
Preparation	79.63 t CO_2e	15.73 %
Waste	18.12 t CO_2e	3.58 %
Location	8.96 t CO_2e	1.77 %
Digital	1.53 t CO_2e	0.30%

Sum	**23,110.08 t CO_2e**
Per Person On Site	2.34 t CO_2e

Mobility: 22,325.96 t CO_2e

Participant travel to and from Vienna was by far the largest contributor to the congress's carbon footprint. The vast majority of these emissions were generated by international flights, reflecting the attendance of many participants from faraway countries. By contrast, only 0.6% of these emissions were accounted for by mobility by train, car, bus or public transport to the congress and 0.11% within Vienna, whether by taxi, public transport or bus.

Accommodation: 278.00 t CO_2e

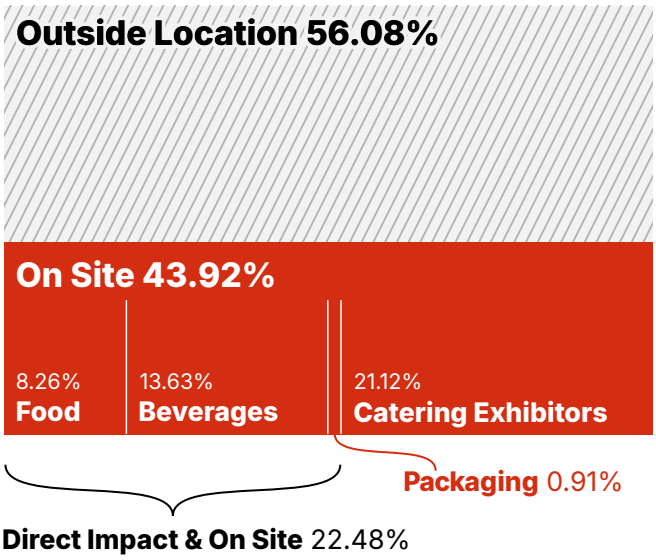
The total amount spent on participants' accommodation equated to 30,027 room nights in Vienna. A large number of hotels had their own established sustainability guidelines, which helped to keep CO_2 emissions per room night relatively low despite the large number of participants.

Catering: 170.01 t CO_2e

Around 20% of the emissions were directly influenced by ERA through food and drink consumed on site and at side events. Notably, only 1.5 t CO_2e (0,9%) were caused by packaging. Around 20 percent of additional emissions came from the exhibitors. The remaining 60% were caused by food and drink consumed outside the venue (e.g. breakfast, dinner, etc.).

Figure 2:

Allocation of catering emissions to the different emission sources. Shares in percent of total catering emissions.



Transport (Goods): 116.23 t CO_2e

The transportation of physical materials and goods to the venue had a significant impact, as many exhibitors transported their materials from different countries. However, ERA mostly used materials from Vienna, with just one truck arriving from Berlin and one from Parma. This minimised logistical emissions.

Materials: 111.64 t CO_2e

Most of the emissions from materials were caused by the exhibitors. ERA was responsible for a smaller amount, in the form of giveaways and printed materials, but these were more sustainable and reduced. Additional emissions were caused by the lifetime usage of event technology.

Preparation: 79.63 t CO_2e

Most of the emissions were caused by the on site exhibitor meetings. Site visits and work carried out on laptops and during video conferences only accounted for around 5% of the emissions.

Waste: 18.12 t CO_2e

Significant emissions resulted from waste disposal. Food waste accounted for 35% of the total emissions, while emissions from other waste were mainly caused by materials from the exhibition. This area highlights a potential area for improvement.

Location: 8.96 t CO_2e

The operational emissions from the event venue itself were comparatively high. It is important to note that this figure primarily covers direct energy use and operational aspects during the event, and does not include the 'grey emissions' associated with constructing the venue. If these were factored in, the figure would be considerably higher.

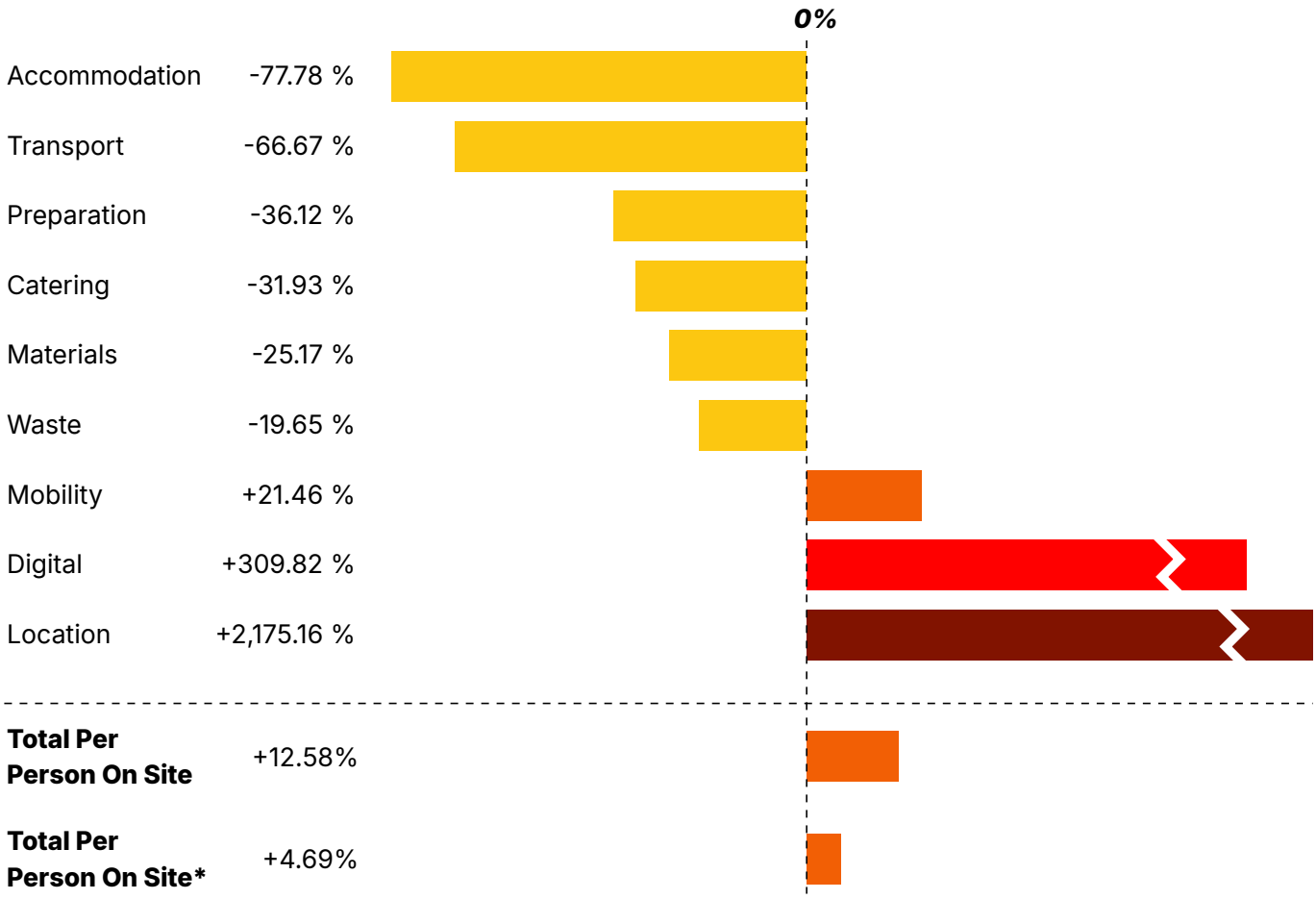
Digital: 1.53 t CO_2e

The digital infrastructure supporting the conference, including virtual participation, website hosting, and email communications, contributed only slightly to total emissions.

CHANGE COMPARED TO LAST YEAR

Figure 3:

Change of emissions per sector compared to 2024. The values for digital and location have been truncated for clarity.



** with exactly same methodology and data points as in 2024*

Compared to the previous year, improvements were made in some areas, while others deteriorated. In addition, differences arose due to further methodological development. These changes are listed transparently.

Mobility: +21.46% per person (+12.81%*)

Despite a higher percentage of people not travelling by plane due to the better location in Europe, emissions have increased. This is primarily due to more attendants outside of Europe, as the travelled distance per person was over 1,000 km greater compared to last year. Additionally, the conversion factor used to calculate passenger kilometres travelled compared to air distance was higher due to international wars.

Accommodation: -77.78% per person

Emissions per person have fallen drastically in this area. One reason for this is that hotels in Vienna are much more sustainable than those in Stockholm. In addition, more up-to-date data is available, meaning

that emissions have also been reduced. Overall, there is an annual progress in relation to CO_2e emissions in the accommodation sector.

Catering: -31.93% per person

The main reason for the lower emissions is that people stayed on site for fewer nights (an average of 0.642 fewer nights per person), meaning less food was consumed. Furthermore, packaging emissions were reduced by more than 90% thanks to the significant reduction in packaging used for the lunch symposia. The reduction is also due to the higher proportion of vegetarian options: around half of the staff catering, for example, was entirely vegetarian.

Transport (Goods): -66.67% per person

The significantly lower emissions can be attributed, in particular, to the improved location in Europe. As most of the stand builders came from Poland, Germany and Austria, significant savings were made.

Materials: -25.17% per person (-45.28% *)

Even though emissions from event technology were included in the calculation for the first time this year due to an improved methodology, overall emissions have fallen. ERA has lower emissions thanks to better and fewer materials, and, presumably also due to shorter distances, exhibitors reused significantly more materials. The Sustainability Challenge also improved the emissions.

Preparation: -36.12% per person

Thanks to its better location in Europe, emissions here have been greatly reduced. Both organisers and the exhibitors had shorter journeys, and more of them could travel by train.

Location: +2,175.16% per person

A total of 208 MWh was consumed this year, compared to 5.7 MWh for cooling and heating in 2024. Although the location is certified as sustainable, major errors must have been made here, as the outside temperatures were only slightly higher than in the previous year. This energy usage caused the much higher emissions.

Waste: -19.65% per person

The sharp reduction in waste from the exhibition is a significant achievement. However, food waste has increased significantly due to serious misconduct on the part of the caterer, despite them being certified for sustainability.

Digital: +309.82% per person (221.15% *)

Including the emails sent this year, which were not available last year, the emissions have increased here. Additionally, there were significantly more website clicks and more hours of virtual participation.

BACKGROUND INFORMATION

The escalating impacts of climate change represent one of the most pressing challenges of the 21st century. According to the Intergovernmental Panel on Climate Change (IPCC), the rapid increase in greenhouse gas (GHG) emissions is triggering profound consequences: "Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred"[1], which lead to weather and climate extremes, the warming of atmosphere, ocean and land, rising sea levels, lower food and water security, higher human mortality, high inequality and overall severe impact on human health and livelihood. While certain impacts are now inevitable due to past emissions, societies must prioritize **adaptation** strategies to prepare for and reduce vulnerability to these disruptions.

Additionally, the "impacts from human-caused climate change will continue to intensify"[2] with growing GHG emissions. Therefore, equally critical than the adaptation strategies is the need to mitigate further harm by drastically cutting anthropogenic GHG emissions (**mitigation**). Without decisive action, we will potentially reach additional irreversible tipping points, such as forest dieback or savanna and dryland degradation. "Their triggering will severely damage our planet's life-support systems and threaten the stability of our societies."[3] The Paris Agreement, which was concluded at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 21 - UNFCCC), emphasizes this urgency by setting a global goal to limit warming to well below 2°C, ideally 1.5°C, above pre-industrial levels. Achieving this target is essential to stave off the most devastating outcomes and secure a sustainable future. As the global industry is already on course to miss this target, we have to fight all the harder to stay as close to 1.5 degrees as possible. Even small improvements make a big difference in the long term and reduce consequential costs drastically.

Events and the Environment: The Urgent Need for Transformation

Events play a pivotal role in shaping industries and societies. They drive innovation, inspire collaboration, and spark critical conversations, making them essential to human progress and connectivity. Yet, the environmental cost of events cannot be ignored. Large-scale gatherings often result in significant waste generation, extensive resource consumption, including energy and water, and substantial carbon dioxide equivalent (CO_2e) emissions. According to a study in 2019, a single event attendee produces 37 kg of CO_2 emissions and 2 kg of waste on average. With 378 million event participants recorded in Germany in 2024 alone, the extrapolated environmental footprint of the event industry in the EU is staggering: approximately 77.6 million tons of CO_2 emissions and 4.2 million tons of waste in just one year. These figures underline the urgent need for systemic changes in how events are planned and executed to align with sustainability goals: With good and early planning, it is possible to reduce a lot of emissions and to save resources and waste, which this report aims to facilitate for the Green Dialysis Conference.

Tracking and Measuring Greenhouse Gas Emissions: A Foundation for Action

1. *IPCC (2023, S.5): Synthesis Report Climate Change 2023: Summary for Policymakers.*
2. *IPCC (2023, S.7): Synthesis Report Climate Change 2023: Summary for Policymakers.*
3. *Global Tipping Points (2023, S. 3): Summary Report 2023.*
4. *EnergieAgentur.NRW (2019): Climate-neutral events*
5. *German Convention Bureau (2024, S. 6): Meeting- & EventBarometer Deutschland 2024/2025*

Reliable measurement of greenhouse gas emissions is the cornerstone of any effective emissions reduction strategy. Tracking emissions provides a baseline for understanding impact and enables progress monitoring. However, achieving accuracy is a persistent challenge, as methodologies and emission factors vary significantly. For example, estimates for air travel emissions can fluctuate by as much as 300%, influenced by factors like flight class and the radiative forcing effect. Even standardized frameworks, such as the GHG Protocol Corporate Standard, which is used for this report, refrain from prescribing specific emission factors, leaving room for inconsistency. Therefore, while emission data is indispensable for planning and improvement, it is best viewed as an evolving tool rather than a definitive metric and should primarily be used for developing reduction strategies for the following events.

The Imperative for Ambitious GHG Reductions

To meet the global temperature goals of the Paris Agreement, ambitious emission reduction efforts must be prioritized. Setting scientific targets is only the starting point; achieving them requires transformative action across all levels of operation. Ensuring a sustainable event demands collaboration with diverse stakeholders: Partners, exhibitors, suppliers, employees and visitors all play vital roles in reducing the overall carbon footprint. This involves integrating renewable energy sources, minimizing waste, incentivizing low-carbon travel options, and embedding sustainability into decision-making processes. This report will go into more detail on potential measures and recommendations resulting from the analysis of the ERA Congress 2025 in Vienna.

OFFSETTING

Offsetting does not undo emissions but offsets them elsewhere, typically on a global scale.

- It is crucial to note that offsetting should not replace direct efforts to cut emissions.
- For unavoidable emissions, offsetting helps mitigate their impact and serves as a valuable complement to the reduction measures outlined in this report.
- To ensure effective offsetting, it is essential to support high-quality, verified projects that prevent double counting and deliver long-term benefits.

GREEN MEETINGS CERTIFICATION

For the 2025 Congress, ERA undertook the significant endeavour of achieving the Austrian 'Green Meetings' certification. This represented a significant commitment to sustainability, making it the largest event to date to receive this certification. The certification process required adherence to a defined set of criteria across multiple operational areas, including venue, mobility, catering and exhibition. It also necessitated collaboration with certified suppliers.

Sustainability Analysis 2025:

- ERA's ambition to achieve certification was an extremely positive and visible signal of its commitment to sustainability.
- The certification process successfully catalysed several high-impact developments, most notably the total elimination of single-use crockery in catering and the significant reduction of carpeting.
- However, the framework revealed significant limitations when applied to an event of this scale and complexity. Several mandatory criteria were either ill-suited or had minimal impact for a large, international congress, resulting in disproportionate administrative effort and limited environmental benefit.
- A critical finding was that certifying suppliers (venue, caterer, booth builder) did not automatically guarantee sustainable performance. The certification framework itself appears to have gaps in essential areas (e.g. tracking food waste, specifying construction materials), meaning that simply 'ticking the box' by hiring certified partners was insufficient to ensure responsible practices on the ground.
- The administrative burden of documenting and fulfilling every criterion was substantial relative to the tangible outcomes achieved in some areas.
- This experience highlighted a fundamental challenge: a standardised national certification may not be flexible or comprehensive enough to address the specific high-impact challenges of a large-scale international medical congress.
- It became clear that the certification was better suited to enforcing baseline changes than providing a comprehensive, end-to-end solution for advanced sustainability management.

Recommendations:

- Maintain the positive, high-impact changes driven by the certification process, such as the commitment to reusable crockery and reducing exhibition materials. These should become standard operating procedure for all future ERA congresses.
- In the coming years, shift the focus away from pursuing formal recertification. Instead, reallocate significant administrative resources towards developing and implementing a bespoke, ERA-specific sustainability strategy.
- This new strategy should focus on targeted, meaningful and data-driven measures that address the congress' main environmental footprints (e.g. stricter exhibitor guidelines, reducing food waste based on data, and promoting sustainable travel) rather than fulfilling a generic checklist.

Use the lessons learned from the 2025 certification as a foundation, but develop a more agile and impactful approach tailored to the unique context and scale of the ERA congress.

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ECENT IS YOUR EVENT MANAGEMENT AGENCY FOR TRULY SUSTAINABLE EVENTS

Our goal is to create unforgettable events that not only exceed your expectations, but also protect our planet by integrating sustainability holistically