

FIS Events Emission Estimation Summary

2025/26 Season



Executive Summary

Data collection approach:

Operational emissions: data was collected from the Local Organising Committees through two channels: the FIS CO₂ Calculator and dedicated data collection forms. Actual data was received from **41 events**, representing approximately **30% of the total number of events**. For the remaining events, emissions were estimated using a per-capita proxy by discipline group, adjusted for national grid factors.

Participant travel: this sits within the National Ski Associations' reporting boundaries. FIS includes it in the total event emissions but keeps it outside the operational figures. This also avoids double counting as the National Ski Associations start reporting it themselves.

Spectator travel: uses event-by-event attendance, taken from the forms where organisers reported it and from published or Race Director figures elsewhere, with venue-specific travel distances.

Reporting year:

The events analysed refer to the 2025/26 ski season.

Reporting boundary:

143 FIS World Cup events across Alpine, Nordic, Freestyle & Snowboard, Para, Telemark and Speed Skiing.

Emissions measured:

Scope 1, Scope 2, Scope 3.

Event types:

Alpine, Nordic, Freestyle & Snowboard, Telemark, Para disciplines, Grass Skiing, Speed Skiing.

Aim of the project:

To estimate the carbon emissions associated with FIS events during the 2025/26 ski season, using a combination of reported data from the FIS CO₂ Calculator and credible proxies to produce a consistent and transparent season-wide estimate.

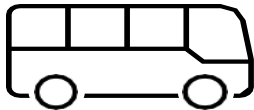
No major FIS World Championships took place during the 2025/26 season, apart from the Ski Flying World Championships in January 2026, which were treated as standard 3 days-World Cup events rather than as a separate multi-week World Championship event like those in Alpine, Nordic and Snowboard/Freestyle/Freeski.

Estimated Carbon Emissions for WC Events

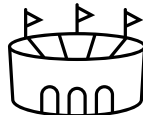
56.781,6
tCO₂e Total Emissions

397,1
tCO₂e per Event

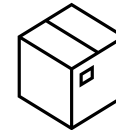
Transport
37.014,8 tCO₂e



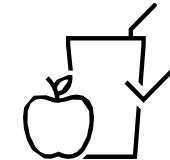
Arena & Energy
13.605,1 tCO₂e



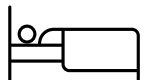
Purchases
1.531,4 tCO₂e



Food & Beverage
2.586,0 tCO₂e



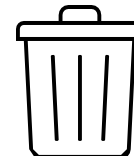
Accommodation
1.370,2 tCO₂e



Equipment
344,0 tCO₂e



Recycling & Waste
311,7 tCO₂e



Stage
18,3 tCO₂e

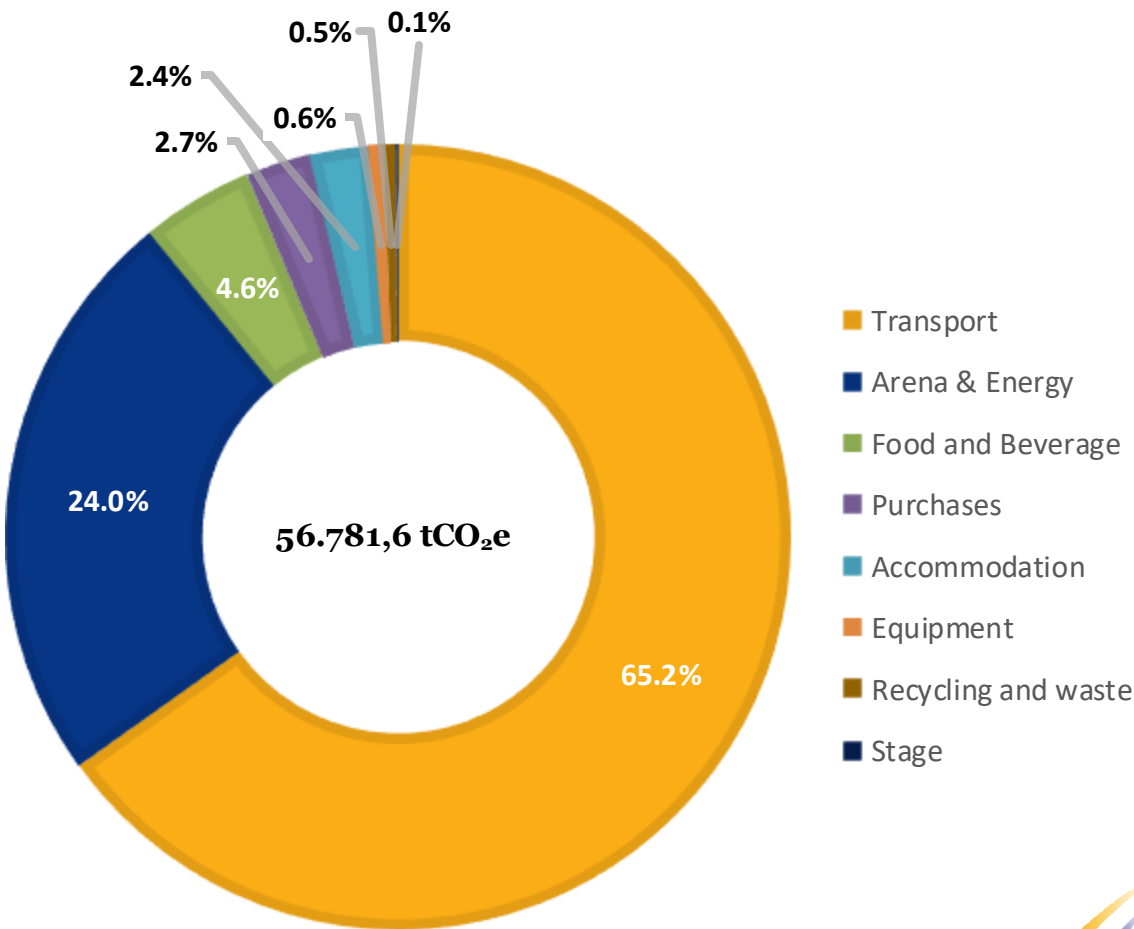


Estimated Carbon Emissions for WC Events

Transport, which includes Participant travel, is the largest source at 65,2% of the total; arena and energy together account for a further 24,0%.

Emission source	tCO ₂ e	%
Transport	37.014,8	65,2
Arena & Energy	13.605,1	24,0
Food and Beverage	2.586,0	4,6
Purchases	1.531,4	2,7
Accommodation	1.370,2	2,4
Equipment	344,0	0,6
Recycling and Waste	311,7	0,5
Stage	18,3	0,1
Total	56.781,6	100

Emissions by sources for ski season 2025 - 2026, shares of tCO₂e

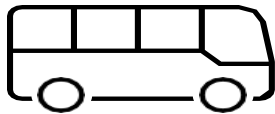


Estimated Operational Emissions

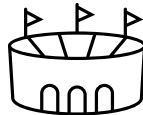
33.926,9
tCO₂e Total Emissions

237,3
tCO₂e per Event

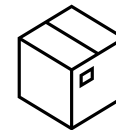
Transport
14.160,1 tCO₂e



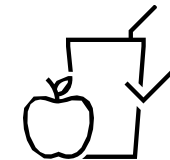
Arena & Energy
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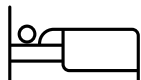
Purchases
1.531,4 tCO₂e



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Equipment
344,0 tCO₂e



Recycling & Waste
311,7 tCO₂e



Stage
18,3 tCO₂e

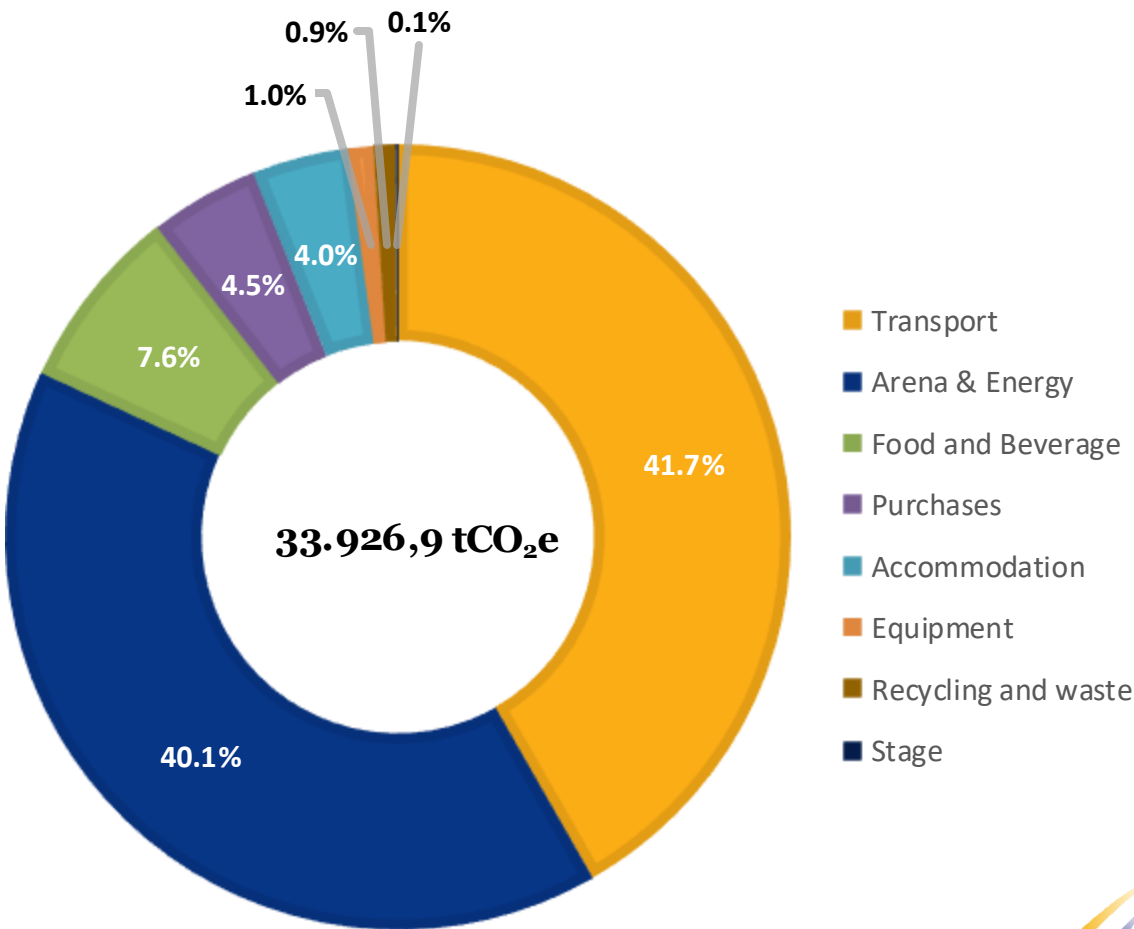


Operational Emissions by Source

Figures come from the organisers, through the FIS CO₂ Calculator and the data collection forms. Transport is the largest source at 41,7% of the total; arena and energy together account for a further 40,1%.

Emission source	tCO ₂ e	%
Transport	14.160,1	41,7
Arena & Energy	13.605,1	40,1
Food and Beverage	2.586,0	7,6
Purchases	1.531,4	4,5
Accommodation	1.370,2	4,0
Equipment	344,0	1,0
Recycling and Waste	311,7	0,9
Stage	18,3	0,1
Total	33.926,9	100

Emissions by sources for ski season 2025 - 2026, shares of tCO₂e

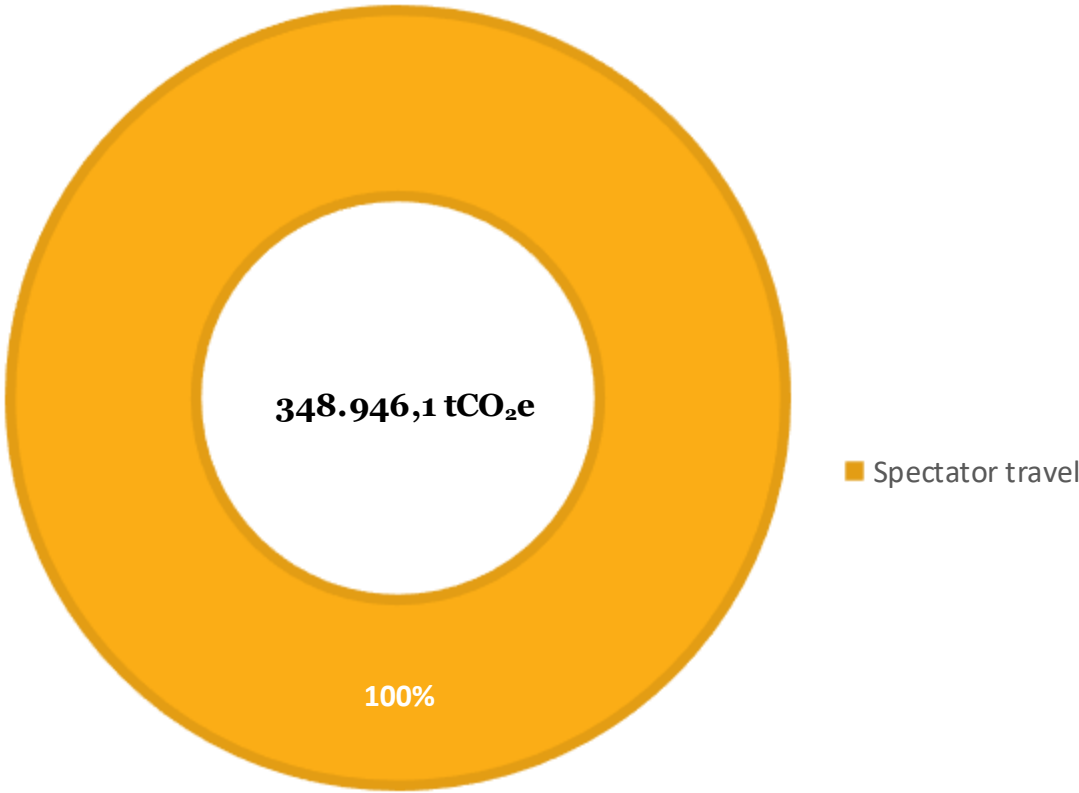


Estimated Carbon Emissions for spectator travel

Spectator travel is reported separately from operational emissions, in line with the Climate Action Framework.

Emissions sources for ski season 2025 - 2026, tCO₂e

Emission source	tCO ₂ e	%
Spectator travel	348.946,1	100
Total	348.946,1	100



Methodology

2025/26 Season

General Considerations

This is the **second season** in which emissions have been measured using the FIS CO₂ Calculator, and the quality and coverage of the input data continue to improve. The Calculator is increasingly becoming the main channel for collecting primary data, allowing emissions to be captured in greater detail and progressively replacing estimates with actual measurements as more events provide their data.

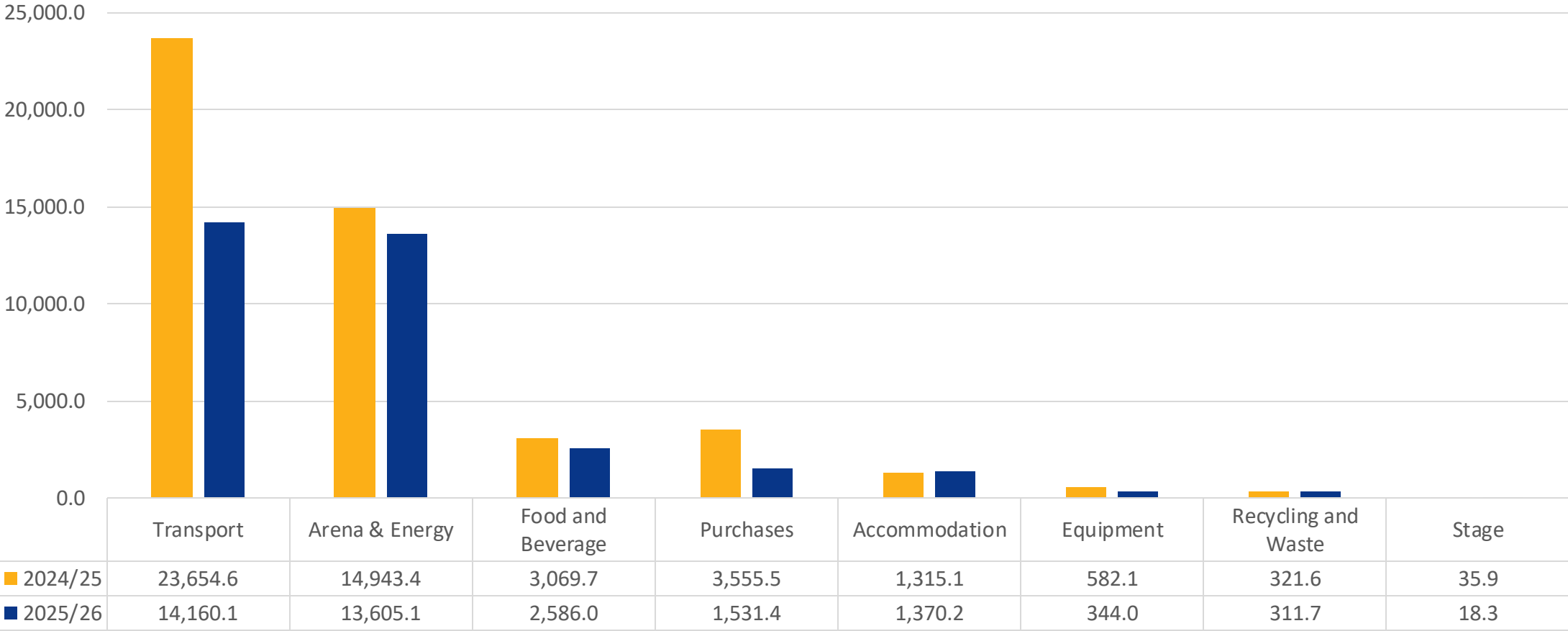
Total event emissions were **56.781,6 tCO₂e**, **3,1% below** the 2023/24 baseline of 58.600,0 tCO₂e, in an Olympic season with a lighter calendar. The baseline was modelled from event questionnaire responses; this season uses actual data entered by organisers through the Calculator and data collection forms for nearly 30% of all events.

Energy is where organisers are already cutting emissions: of the 1,29 GWh reported, **48% came from certified green electricity** and a further 9% was self-produced, with 11 events running fully or partly on guarantees of origin. It is also the category organisers can act on fastest.

Arena and energy are reported together from this season, because at venue level they are one decision: arena emissions are largely driven by how the site is powered and heated, and splitting them made comparison between events unstable. Combined they are **40,1%** of operational emissions, second to transport at **41,7%**.

Participant travel, included in the total event emissions, sits within the National Ski Associations' reporting boundaries and is kept outside the operational figures. As with the other data, the quality and coverage will continue to improve as more National Ski Associations provide primary data. Each additional Calculator return helps replace a proxy with an actual measurement, supporting increasingly consistent and like-for-like year-on-year comparisons.

Operational emission sources, 2024/25 vs 2025/26, tCO₂e



Operational Emissions

This is the **second season** measured with the FIS CO₂ Calculator, and the picture it provides is more complete than a year ago. Data is collected through two channels: the Calculator and the **data collection forms** sent to each organiser. **41 of the 143 events** reported primary data directly this season, recorded emissions activity by activity. The remaining events are covered through estimates, ensuring that all **143 events** are included in the season total.

For the events that did not report, the estimate has become considerably finer. Instead of one correction factor applied across the circuit, per-capita rates are now built **separately for each discipline group**, and the hotel and catering drivers come from the events that reported both their nights or meals and the matching emissions, so they reflect how these events really run. Electricity is valued with the **grid factor of the host country**, with a separate rate where the organiser bought certified green supply.

The number of **accredited people**, which drives those rates, is reconstructed in **three tiers**: the real total where the form provides it, then FIS IT registrations of competitors and staff scaled by a calibrated factor, then athletes entered on fis-ski.com scaled per category. Each factor is a median taken from the events that reported real numbers, and submissions are read against the Calculator before they enter the total.

Together this gives **33.926,9 tCO₂e** over 143 events and **166.204 accredited people, 204 kg each**: a figure that can now be compared event by event.

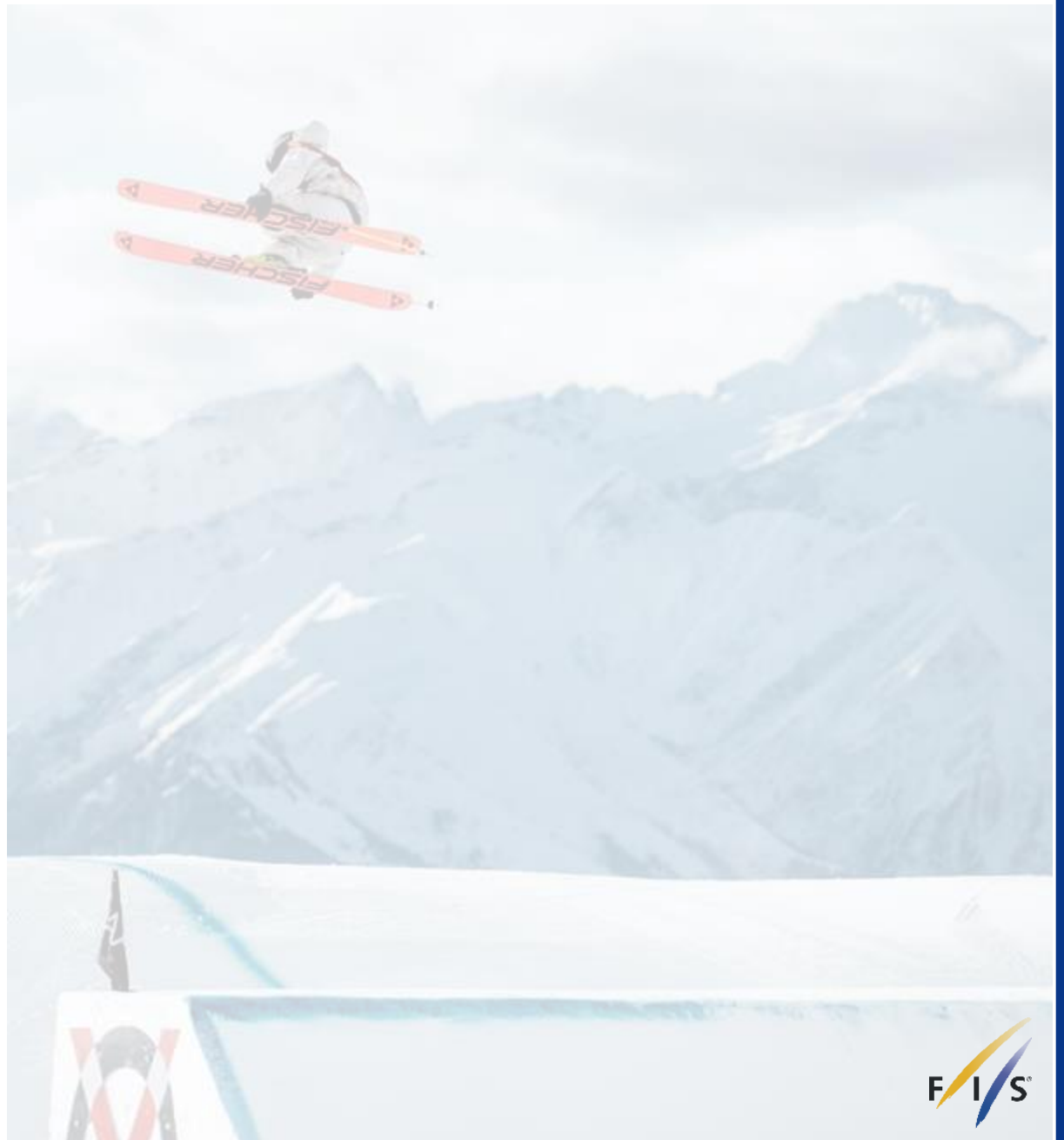
Participant Travel

Participant travel sits within the National Ski Associations' reporting boundaries. FIS includes it in the total event emissions but keeps it outside the operational figures. This also avoids double counting as the National Ski Associations start reporting it themselves.

The estimate is built race by race. Every start list is read to count **participant-trips** rather than starts: participants racing several events at one venue make one journey, so the maximum fielded per event and gender is taken. That gives **13.908 participant-trips** from 26.612 starts across **73 nations**.

Each trip is placed geographically, between the team's home base and the venue, and split into air and road legs. It is valued with the **Norwegian Ski Federation's real per-discipline intensity**, the only measured federation data available, plus each nation's start- and end-of-season flights.

The total sits at 1.643 kg per participant-trip. Applied back to Norway the model returns the figure the federation reports.

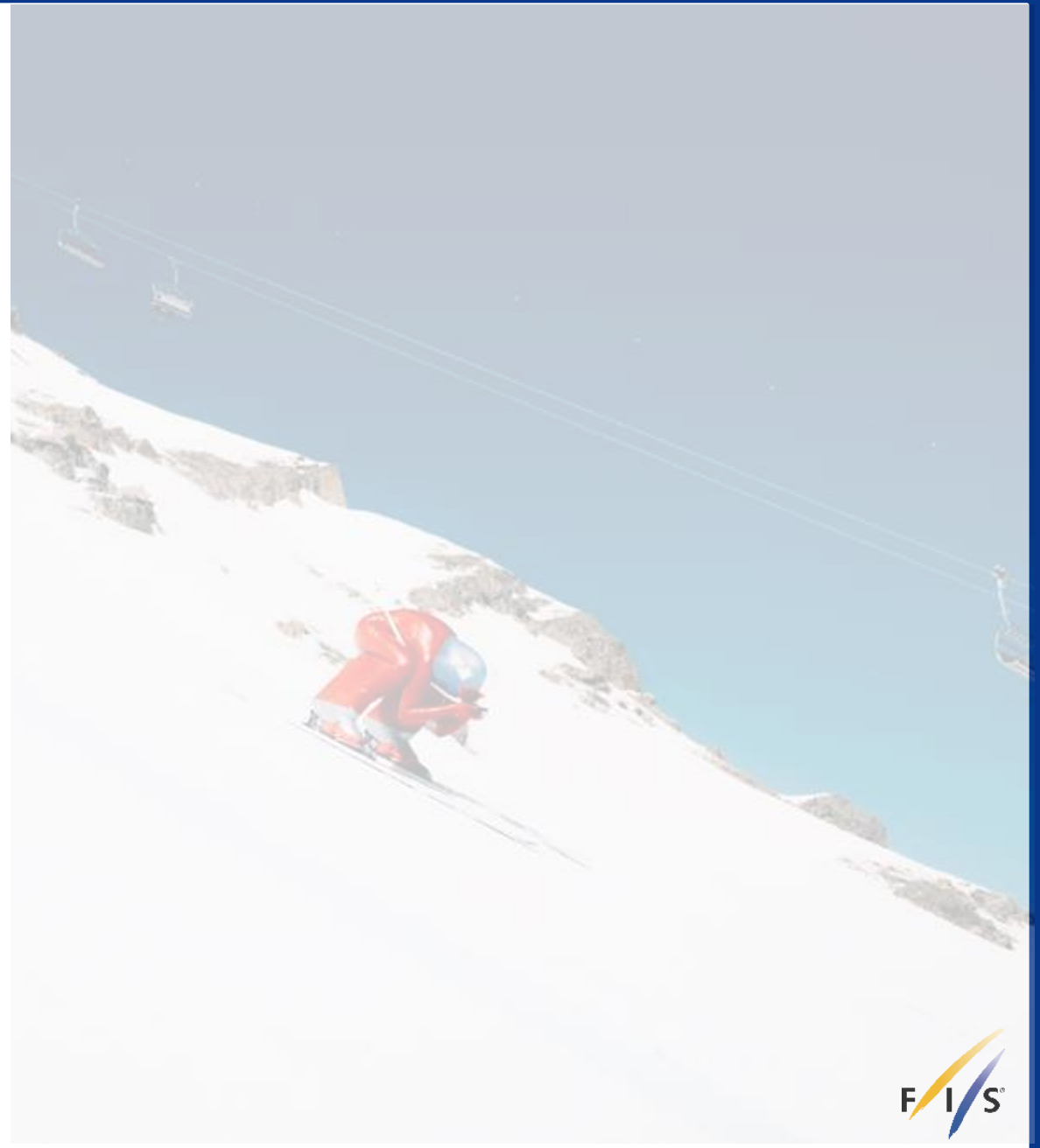


Spectator Travel

Attendance was established on an event-by-event basis using available information from event forms, Race Directors and LOCs and publicly available attendance data. All 143 events now have a spectator figure recorded.

Each audience is split by travel behaviour: **1% already on site**, **59% local car** over a 100 km return trip, **10% public transport**, **20% regional** and **10% international** (30% regional and no international for events below 1.000 spectators). Distances come from country-to-country matrices for each venue.

Across 1.082.920 spectators this gives **348.946,1 tCO₂e**. It is reported separately from operational emissions, in line with the Climate Action Framework, because no single body owns or can control it.



Notes

- Calculating CO₂e requires collecting and verifying large amounts of data. Where data is hard to obtain, **assumptions** keep every emission category covered, which inevitably influences the final figures. FIS aims for the most accurate calculation possible, even where estimates are involved.
- Each season in the Olympic cycle has a **different number of events**, which affects year-on-year comparisons.
- Event data was processed internally with the FIS CO₂ Calculator and the sustainability team. **Green Producers Club (GPC)** reviewed the methodology, assumptions and emission factors, so calculations stay consistent across host countries' energy mixes.
- The review found the methodology transparent and well documented, combining direct event data with proxy-based estimates so a wide range of events can be compared.
- Overall it rated the approach **transparent, methodologically sound and reasonably reliable**, especially for operational emissions, and appropriate for an indicative seasonal footprint. Spectator travel assumptions remain the main limitation.
- Green Producers Club suggested **expanding direct data collection**, strengthening international travel data and validating spectator travel assumptions with surveys or ticketing data.