

# REDUCING TRAVEL EMISSIONS THROUGH THE SNOW CRYSTAL PROJECT

## NATIONAL FEDERATION NORWAY

### ABSTRACT

The Norwegian Biathlon Association launched its Project Snow Crystal as their contribution to the climate cause. Its goal? That everyone who loves the winter clearly signal their impatience for climate measures and action plans that genuinely help save our winters—and our sport.

The Certification company DNV estimates that Norway will only manage to reduce emissions by 25 percent by 2030, rather than the 55 percent they have committed to. At the Norwegian Biathlon Federation, they realized that their responsibility extends beyond crossing the finish line first. That is why they wanted to urge politicians to move faster and develop credible action plans. Norway, as a proud winter nation, should lead the way with climate measures that truly make a difference.

As a following action, the Norwegian NF decided to reduce their own emissions from elite team travel and inspire change across the sport. By replacing flights with buses, committing to no private jets or business class travel, and adjusting logistics for equipment

transport, the team cut its World Cup travel footprint more than half, during the first trimester in 2023/24, from 37,5 tonnes CO<sub>2</sub> the previous season, to 20,3 tonnes CO<sub>2</sub> in 2023/24.

The project gained national media attention and set an example for younger athletes and clubs, who are now encouraged to travel more sustainably.

### WHAT WAS THE GOAL?

The Norwegian Biathlon Association launched the Snow Crystal Project in January 2022 to accelerate climate action in biathlon. The initiative responded both to the growing public debate in Norway about winter sports' carbon footprint and to the sport's fundamental dependence on snow. The aim was clear: to reduce emissions from elite team travel and to set an example that would inspire younger athletes and the wider biathlon family to adopt more climate-friendly habits.



## HOW WAS THE GOAL ACHIEVED?

The main focus was on reducing travel emissions, which are a major contributor to the sport's footprint. For the 2023/24 season, the Norwegian team swapped short-haul flights for modern, sponsor-provided buses whenever possible.

- By travelling by bus from Oslo to Östersund instead of flying via Stockholm, the team cut emissions by 2.7 tonnes of CO<sub>2</sub> during the first World Cup alone.
- Similar approaches were taken for several other World Cup rounds, supported by logistics solutions such as using the wax trailer and additional cars for baggage, rifles, and equipment.
- The team also committed to not travelling in business class or on private jets, further reducing their footprint.

As a result, travel emissions from the first trimester World Cup fell from 37.5 tonnes CO<sub>2</sub> in 2022/23 to 20.3 tonnes in 2023/24, almost halving the footprint in just one year.



## WHOLE-SEASON COMPARISON (ELITE TEAM TRAVEL)

To show the overall scale of impact, the NF compared travel emissions across the full 2022/23 and 2023/24 seasons (note: figures are based on the team's flight-emissions comparison document; all flights are economy class, mainly commercial, with some IBU charters).

- European World Cups (Trimesters 1+2): emissions decreased from 58.7 tonnes CO<sub>2</sub> (2022/23) to 40.9 tonnes CO<sub>2</sub> (2023/24) – a reduction of 17.8 tonnes CO<sub>2</sub>.
- World Championships: 16.1 tonnes CO<sub>2</sub> (Oberhof 2023) vs 17.5 tonnes CO<sub>2</sub> (Nove Mesto 2024).
- Trimester 3: in 2023/24, overseas travel to Soldier Hollow and Canmore contributed 132.15 tonnes CO<sub>2</sub>, plus Holmenkollen 2.99 tonnes CO<sub>2</sub> (total trimester 3: 135.14 tonnes CO<sub>2</sub>).

This comparison illustrates a key learning: short-haul reductions in Europe were substantial, but long-haul flights can dominate a season's footprint when overseas rounds are included.

## WHICH IBU SUSTAINABILITY ISSUES DOES IT ADDRESS?

- **Emissions from travel & transport** – The project directly reduced emissions by replacing flights with bus travel and changing travel routines.
- **Inadequate sustainability awareness among biathlon stakeholders** – By gaining national media attention and sharing athletes' experiences on social media, the project raised awareness of more climate-friendly choices.
- **Unavailability of education & training** – By targeting younger athletes and clubs, and demonstrating practical ways to reduce travel emissions, the initiative provided a form of education that encourages sustainable habits at grassroots level.
- **Inactive lifestyle / grassroots participation** – By encouraging clubs in Norway to organise buses for competitions, the project supported both participation in sport and more sustainable mobility solutions.

## WHAT WERE THE CHALLENGES FACED?

One of the biggest challenges was convincing athletes to adjust long-established habits. Elite competitors are used to flying in order to save time and maximise opportunities for rest, and bus travel represented a cultural shift.



Logistics also posed hurdles, as buses had less luggage capacity compared to planes. Equipment such as skis, rifles, and technical gear had to be creatively distributed between the wax trailer and accompanying vehicles.

Finally, it was important to ensure that the message spread beyond the elite team, reaching the wider biathlon community in Norway to encourage behaviour change at all levels.

Athletes reported that the bus option was comfortable and efficient, and that travelling together “felt good”. Instead of changing flights, they were able to relax for the whole trip. For newcomers, travelling by bus also created more opportunities to socialise with the group, making it a positive start going into a new season.

## WHAT ARE THE NEXT STEPS?

The Norwegian Biathlon Association intends to continue measuring and cutting emissions with the Green Producer Tool, a climate footprint calculator that tracks emissions from travel, energy use, and logistics, helping the team identify new areas for reduction.

Future plans include offering buses free of charge whenever possible (or at low cost) for participants at

national competitions and events, further embedding sustainable mobility into Norwegian biathlon. For instance, during the last National Championships in Stiklestad (Trondheim), buses were provided to and from the stadium on all days, creating a smooth and efficient travel option for athletes, teams, staff, and spectators.

The long-term ambition is not only to reduce emissions in elite sport but also to normalise sustainable travel for the entire biathlon family, ensuring that the Snow Crystal Project leaves a lasting legacy.

The NF’s longer-term climate ambition is net zero by 2030. At the same time, they recognise this will be challenging while international competition still requires air travel - especially when competing overseas (USA/Canada), where emissions rise significantly due to long flight distances, as seen in the 2023/2024 season.

**Norway has shown how elite teams can cut travel emissions, shift habits, and inspire the wider biathlon community to embrace climate-friendly mobility.**