

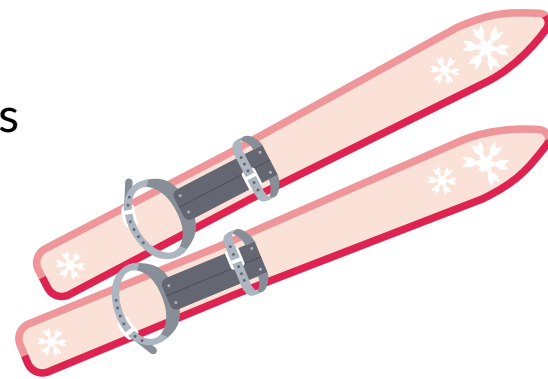
# TOWARDS PFAS-FREE COMPETITIVE SKIING

## BACKGROUND TO THE ROADMAP

### What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of more than 4700 fluorinated organic compounds with unique properties, including repellence of water, oil and dirt. They have many different uses, including:

- outdoor and protective textiles
- impregnation
- food packaging
- fire fighting foams
- ski waxes.



Strong carbon-fluorine bonds hinder degradation of PFAS in nature, and some persist indefinitely. Some PFAS have been shown to be toxic, and have been linked to negative health effects.

### PFAS in skiing

During ski waxing, direct PFAS exposure occurs through emissions of volatile fluoro-organic vapours and airborne dust particles.



While skiing, PFAS wears off into snow and spreads in the environment due to ski-snow abrasion. Persistence and mobility of PFAS leads to bioaccumulation and possible human exposure through food and drinking water.

### Why phase out PFAS globally?

- **Health concerns** from exposure to PFAS
- **To reduce environmental pollution** by PFAS
- **EU restriction of PFOA** is effective from July 4th 2020, leading to international fair-play challenges
- **An EU action plan** is under development to eliminate non-essential uses of PFAS
- **To promote equality** in the sport, which will allow youths a level playing field
- **To strengthen the reputation** of ski sports among sponsors, media, and the general public
- **To lead the way** for other sectors to implement similar phase-outs



### The Roadmap

PFAS phase-out in skiing will include parallel work within:

- Product innovation
- Research and testing
- Regulations
- Competitions/events
- Awareness

See next page for roadmap overview



### Ski competitions without PFAS

PFAS-free competitions must be **"equal-for-all"**, regardless of athlete level. For successful phase-out, regulation in combination with robust test methods will be required.

**Voluntary initiatives**, awareness campaigns and positive incentives are vital in the transition.

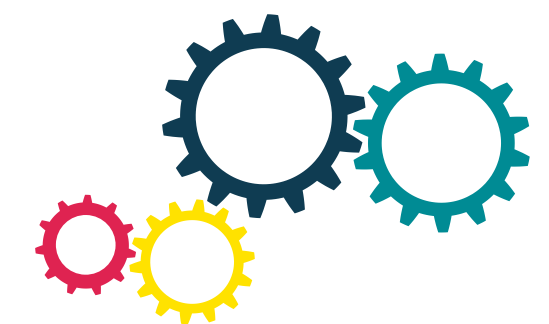
**Work safety** and ski preparation instructions are a priority regardless of PFAS use.



### Emerging solutions

Development before 2020 has revolved around:

- A new test method to identify PFAS on skis: SkiFT
- PFAS-free recreational ski waxes from both market leaders and new start-ups
- Trust-based voluntary initiatives among Nordic competition organisers
- Regulation within sports; e.g. youth ban in Norway
- Legislative measures as PFOA restriction in EU



# ROADMAP: TOWARDS PFAS-FREE COMPETITIVE SKIING

PRIORITY ACTIONS UNTIL 2025

