



2018 ANNUAL UPDATE ON “GORE FABRICS’ GOAL AND ROADMAP FOR ELIMINATING PFCs OF ENVIRONMENTAL CONCERN”

INTRODUCTION

In February 2017, Gore Fabrics announced the “Goal and Roadmap for Eliminating PFCs of Environmental Concern (PFC_{EC})” from the lifecycle of its consumer fabrics products following an intense and fruitful discussion with Greenpeace. This has led to an ambitious research and development (R&D) program for Gore Fabrics that stretches over several years to 2023. This program will allow us to develop new consumer outdoor products targeting the optimal combination of performance and improved environmental footprint.

As we want to make sure that our customers, end consumers and the broader public stay with us on this journey we will publish regular updates on progress we are making in achieving our goals.

Key: ● Completed on time ● On track ● Delayed

PROGRESS REPORT JANUARY 2018

MILESTONES

(see details in GORE FABRICS’ GOAL AND ROADMAP document)

STATUS

PROGRESS

1. Eliminate PFC_{EC} from laminates that correlate with **85%** of finished consumer product units (jackets, shoes, gloves and accessories) by end of 2020, **100%** by 2023

Gore Fabrics has dedicated 7 internal teams to develop new fluorinated and non-fluorinated technology over the coming years, making this a priority in our R&D portfolio. We are on track to meet this goal.



2. Gore Fabrics introduces **new, non-fluorinated DWR** for A/W 2018 collection in Q2 2018 (see 2.2.1.)

The new non-fluorinated Durable Water Repellency (DWR) has been selected after a thorough screening and field test phase which demonstrated that this PFC_{EC} Free DWR meets our performance standards for activities like lift-served skiing and day hiking.



In the beginning of 2018, Gore Fabrics will begin shipping laminates treated with this new PFC_{EC} Free DWR to our customers.

In the Fall 2018 season, a large range of outdoor brands will introduce new retail products made from these laminates.

3. **Product labeling** that allows consumers to connect Gore Fabrics’ progress to the products available in the retail market (see 4.0)

Gore Fabrics created new GORE-TEX® hangtags to:

- inform consumers of our PFC_{EC} goal
- designate products that do not contain PFC_{EC} in the DWR and/or the entire product



MILESTONES

(see details in GORE FABRICS' GOAL AND ROADMAP document)

STATUS

PROGRESS

4. New ePTFE barriers made **without** using PFC_{EC} as polymerization aids (see 2.2.2.)

Gore Fabrics and our suppliers made significant progress in developing new PTFE grades that no longer require PFC_{EC} in their manufacturing. In late 2017, we began early prototyping efforts with these new PTFE grades.

Although technical uncertainties remain, we are on track to meet this goal.



5. **Alternative** membrane **materials** that are not based on fluorinated materials (see 2.2.3.)

Gore Fabrics evaluated numerous options for non-fluorinated membrane materials and selected a limited range of technologies for continued assessment.



6. **PFC_{EC} Free DWR** for the most technically challenging uses (see 2.2.4)

The development of PFC_{EC} Free DWR for highly demanding end-uses is a significant challenge ahead, but with close external collaboration we have been making substantial progress and expect to narrow our work to the most promising routes in 2018.



7. **PTFE incineration study** to evaluate potential releases of a broad range of PFC_{EC} over representative municipal incineration conditions (see 5.1.)

Gore Fabrics evaluated scientific resources worldwide and commissioned the renowned Institute of Technical Chemistry at the Karlsruhe Institute for Technology, Germany, to conduct the PTFE incineration study in its pilot size municipal incineration plant. An independent third party laboratory was selected to perform sample analyses.

A variety of stakeholders have provided input on the draft of the study plan.

Validation campaigns ran in September and November 2017, and the incineration study campaign will be carried out in February 2018.

KIT and Gore Fabrics intend to publish the findings in a peer-reviewed journal (timing will depend on peer-review process).

Evaluating global resources, designing the study and consulting with a range of stakeholders took more time than anticipated, therefore this project is running behind schedule.



8. Implementation of a standardized **Hazard Assessment Approach**, reporting to begin by end of 2018 (see 3.1)

Beyond our long standing work with bluesign® systems and OEKO-TEX® Standard 100, Gore Fabrics will develop and deploy additional protocols to rapidly screen the properties of new materials resulting from its innovation program. Gore's product safety and chemical compliance experts have evaluated several emerging methodologies and will decide on one methodology early this year.

