

Meeting with EC DG GROW (Director Kristin Schreiber & Team)



15 June 2021



Agenda

- Tour de Table
- Introduction to 3M
- EU Policy Agenda: Green Deal & Chemicals Strategy for Sustainability

Introduction to 3M

3M in Europe, Middle-East & Africa



- 3M located in 53 countries across 7 regions
- 21,000+ employees including 1,500 scientists, 5,800 customer-facing employees, and 11,100 workers in Manufacturing & Supply Chain
- 44 manufacturing sites and 20 Distribution Centers

Our 4 Business Areas for Government, Industry & Society

Safety & Industrial



- Personal safety
- Adhesives and tapes
- Abrasives
- Closure and masking
- Electrical markets
- Automotive aftermarket
- Industrial minerals

Transportation & Electronics



- Display materials
- Automotive and aerospace
- Electronics materials
- Commercial solutions
- Advanced materials
- Transportation safety

Health Care



- Medical solutions
- Oral care
- Separation and purification sciences
- Health information systems
- Drug delivery
- Food safety

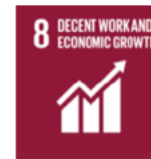
Consumer



- Home improvement
- Stationery and office
- Home care
- Consumer health care

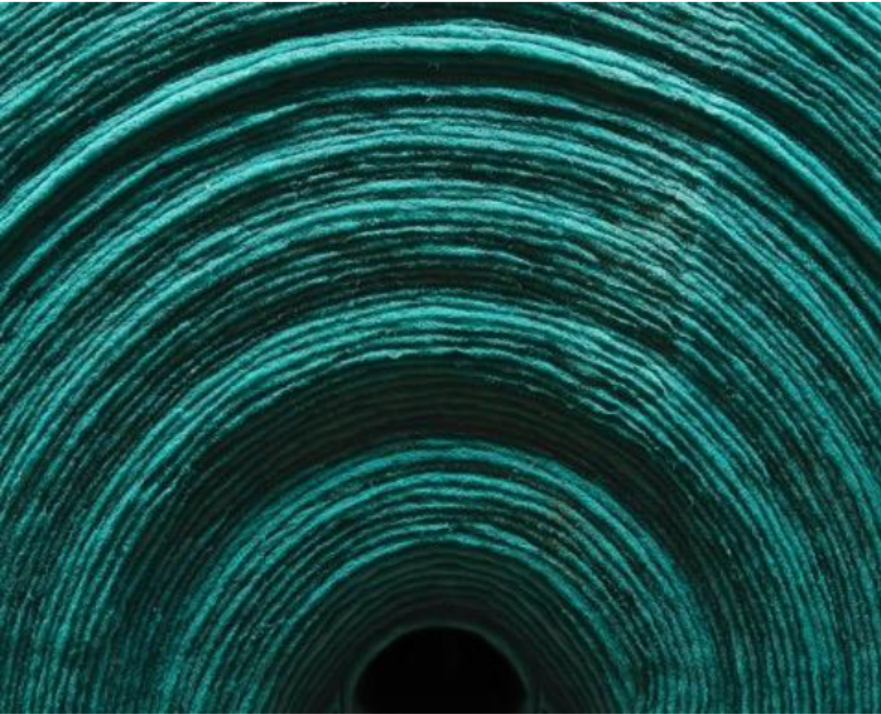
Alignment with the UN Sustainable Development Goals

The UN SDGS serve as a global pledge to leave no one behind in pursuit of social, environmental and economic peace and prosperity



New Carbon & Water commitments

Building on 3M Sustainability Strategic Framework



Science for Circular

Our **water goals** will **reduce water use** by 25% in our facilities (10% by 2022, 20% by 2025 & **25% by 2030**), **and improve water quality** when returned to the environment after use in our manufacturing operations

Science for Climate

Our **carbon goal** will make 3M achieve **carbon neutrality in operations by 2050** while aiming for a 50% reduction of carbon emissions by 2030 and 80% by 2040 (note: 2019 is the baseline measure year)

Science for Community

Our **social goals** expand opportunities for underrepresented communities to participate and succeed in the future workplace, and make 3M **lead in social equity and justice**



EU Policy Agenda: Green Deal & Chemicals Strategy for Sustainability

3M supports the EU Single Market & Green Deal: science based legislation to support innovation & jobs

- ❑ 3M is committed to promoting innovation, safe use of their products, sustainable manufacturing and stewardship across the industry.
- ❑ 3M advocates for a balanced regulatory environment based on scientific facts to ensure European industries remain competitive and sustainable.

3M & PFAS as a practical example:

- ❑ 3M manufactures, imports, uses, and supplies various PFAS and PFAS containing products for numerous, primarily industrial, applications.
- ❑ We produce in Zwijndrecht, Belgium & Gendorf, Germany (2 out of 44 sites).
- ❑ 3M participated to Calls for Evidence related to evaluating restriction options for PFAS.



Chemicals Strategy for Sustainability

- Need to maintain **consistency** between different Green Deal objectives.
- Keep the chemicals policy framework in Europe **proportionate & science based**.
- Maintain regulatory **predictability for investments**: the REACH regulation is a success story and is achieving its objectives. Let's preserve the established norms and framework. It takes time to implement agreed targets, and constantly 'moving the goalposts' can be both costly and wasteful.
- It is critical that the re-opening of **REACH & the Classification, Labelling and Packaging (CLP) Regulation remains “surgical”**. Let's build on what has been successfully achieved to date and not change the foundations.

PFAS Action Plan

- PFAS is a very broad and diverse group of substances with different properties. Regulating and restricting PFAS as a group would have little scientific basis and would be disproportionate.
- PFAS as regulatory testing ground for new concepts under the CSS: the **grouping of chemicals**, the **essential uses concept** and managing chemicals based on their **persistence alone**. These concepts lack a regulatory framework today: it would be premature to apply them to any chemical, let alone a group of substances as wide and diverse as PFAS.
- Many products need to be durable and perform over time under demanding, sometimes extreme, conditions. A loss in any of those key areas may lead to additional maintenance or shorter lifespans of products.
- EU Commission needs to **ensure that a differentiated approach is adopted between various PFAS**, based on evidence as to which PFAS are posing an unacceptable risk to the environment and health. To do otherwise risks phasing out chemicals which are set to play a critical role in helping industry to innovate towards a decarbonized and circular economy.

→ Need alternative grouping approach for regulatory purpose

Grouping of substances (Cefic position)

Regardless of how grouping is used, Cefic believes it needs to be based on the following key principles:

- The grouping process should be transparent for all stakeholders;
- Grouping should consider risk and hazard profiles in addition to structural similarity;
- Similar family name or backbone should not be confused with similar hazard profile;
- **Identification of substances in a group should be based on a unique substance ID to facilitate digitalisation;**
- A proposed regulatory measure should be enforceable.

It is critical that grouping is based on solid scientific standards and applied coherently across REACH independently of its purpose.

Concept of Essential Use

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 Check for updates

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The concept of essential use for determining when uses of PFASs can be phased out

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Because of the extreme persistence of per- and polyfluoroalkyl substances (PFASs) and their associated risks, the Madrid Statement argues for stopping their use where they are deemed not essential or when safer alternatives exist. To determine when uses of PFASs have an essential function in modern society, and when they do not, is not an easy task. Here, we: (1) develop the concept of “essential use” based on an existing approach described in the Montreal Protocol, (2) apply the concept to various uses of PFASs to determine the feasibility of elimination or substitution of PFASs in each use category, and (3) outline the challenges for phasing out uses of PFASs in society. In brief, we developed three distinct categories to describe the different levels of essentiality of individual uses. A phase-out of many uses of PFASs can be implemented because they are not necessary for the betterment of society in terms of health and safety, or because functional alternatives are currently available that can be substituted into these products or applications. Some specific uses of PFASs would be considered essential because they provide for vital functions and are currently without established alternatives. However, this essentiality should not be considered as permanent; rather, constant efforts are needed to search for alternatives. We provide a description of several ongoing uses of PFASs and discuss whether these uses are essential or non-essential according to the three essentiality categories. It is not possible to describe each use case of PFASs in detail in this single article. For follow-up work, we suggest further refining the assessment of the use cases of PFASs covered here, where necessary, and expanding the application of this concept to all other uses of PFASs. The concept of essential use can also be applied in the management of other chemicals, or groups of chemicals, of concern.

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Environmental significance

PFASs are manmade organic contaminants that can be found everywhere in the global environment, largely as a result of their high persistence and wide use. Based on concerns regarding their high persistence and other hazardous properties, it has been argued that the production and use of PFASs should be limited to essential uses only. In this paper, we translate the concept of “essential uses” or “essentiality” into three criteria to determine when uses of PFASs are essential, or not, and demonstrate how the criteria can be applied to different use cases of PFASs. This approach can inform and encourage manufacturers, retailers and end users to consider phasing out and substituting uses of PFASs. Thus, the uses and related emissions of PFASs can be systematically limited and the long-term harm to human health and the environment can be avoided.

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Authors and Origin

- [Ian T. Cousins](#), a professor of environmental science and analytical chemistry at Stockholm University
- Led team of science and health researchers that authored the plan
- All are members of the Global PFAS Science Panel, a group of academics and government scientists from Europe and the US
- Financially supported by [The Tides Foundation](#), a philanthropic organization focused on social justice
- Developed in response to further define the concept of essential use established in the Madrid Statement in 2015

Premise

1. Develop the concept of “essential use” based on an existing approach described in the Montreal Protocol on chlorofluorocarbons (CFCs)
2. Apply the concept to various uses of PFASs to determine the feasibility of elimination or substitution of PFASs in each use category
3. Outline the challenges for phasing out uses of PFASs in society

Design Considerations

- Applying Cousins' essential use concept:

Strengths	Limitations
Provides a potential framework for evaluating necessity	Academic approach with limited implementation detail
Suggests coordination with industry and governments via existing processes (ie. REACH socio-economic assessment)	Seeks to restrict all 'non-essential' uses, irrespective of availability of alternatives or other impacts on business and society
	Does not balance the benefits of the uses with the risks; trade-offs in product performance and safety are not central considerations

- The main challenge for implementing the concept is its subjectivity

3M has attempted to integrate some of these concepts in our chemical management

3M Considerations on Essential Use Concept

- Essential use definitions and tools for evaluation are encouraged to be grounded in existing governance and processes, such as the REACH principles. Key features for the integration of the concept in REACH should be:
 - Balance essentiality with specific risk assessments of the uses at stake and the principle of proportionality
 - Ensure a proper, robust analysis of alternatives
 - Adopt clear and transparent guidelines
- Essential use evaluations are multi-dimensional and should address considerations such as societal benefit, environmental stewardship and the availability of alternatives
 - Evaluation of alternatives should include the lifecycle assessment (LCA) to avoid regrettable substitutions
- Definitions should not be static and encourage future innovation or emergency situations (ie. learnings from COVID crisis)
- Avoid creating rigid tools and/or definitions in isolation
 - Balance of directive, yet intent-based guidance, that can be adaptable to the vast and diverse applications
 - Tools should not be a pass/fail, one-size-fits all
- Implementation issues need to be clarified and resolved with a broad coalition of support

Thank You



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