

# Substitution of chemicals – early warnings, concepts and available tools (with a note on the status of PFAS restrictions for textiles)

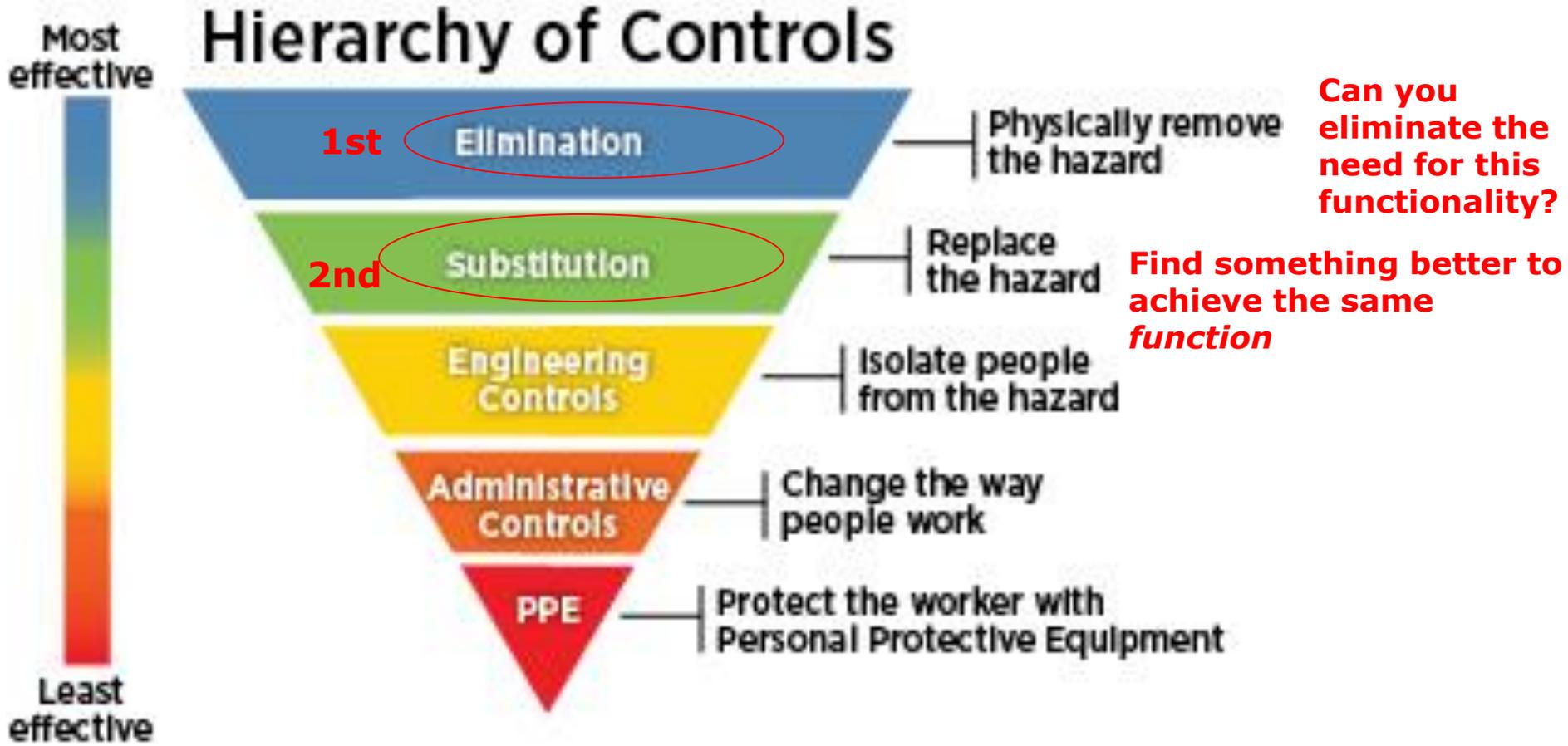
Webinar: advances in the substitution  
of hazardous flame retardant  
chemicals in home textiles  
FLAREX final event  
17 June 2020

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## Reminder: why the FLAREX project and how?

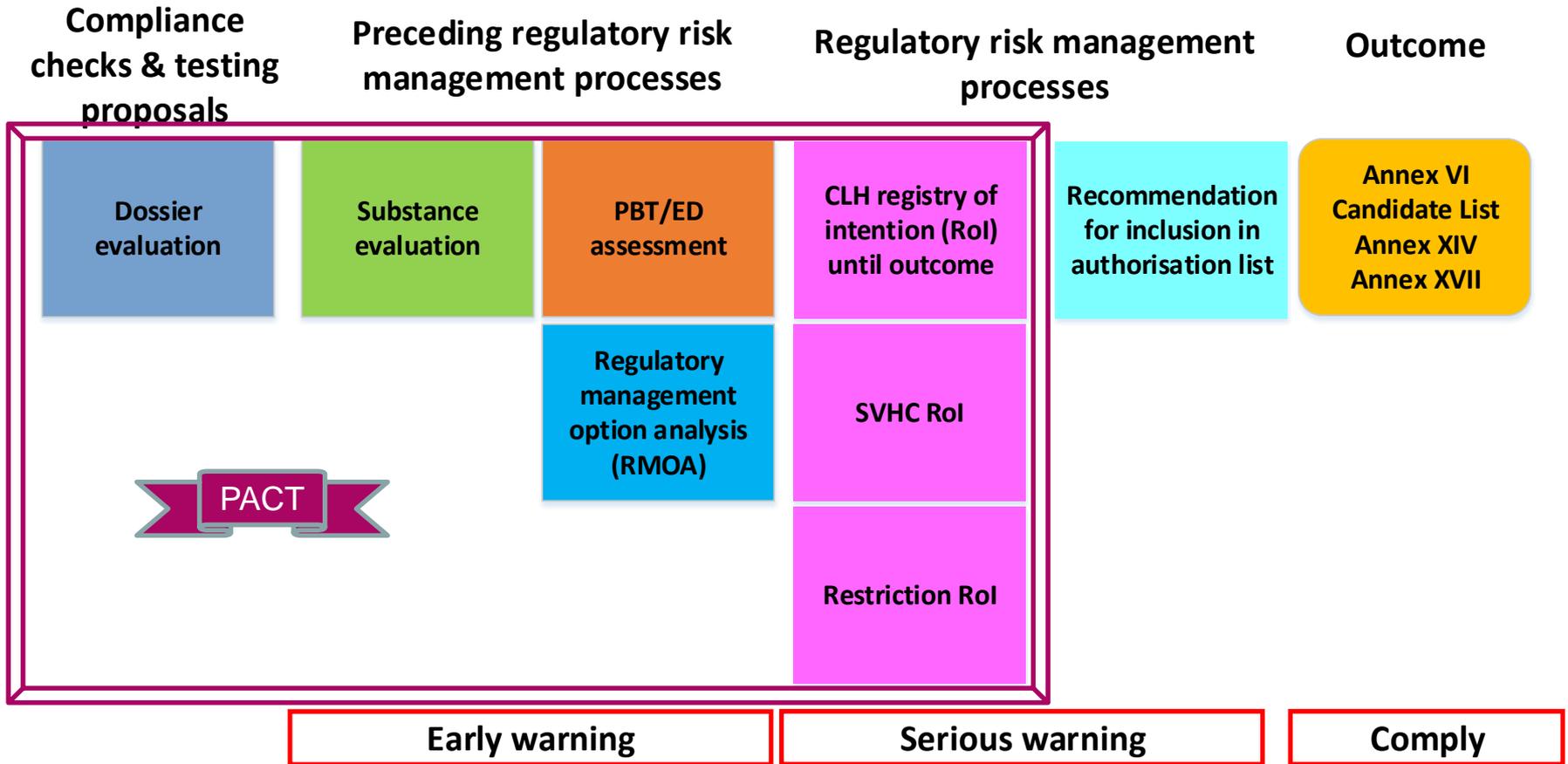
- Several flame retardants or synergists are hazardous and subject to regulatory risk management measures or under regulatory scrutiny  
→ need for safer alternatives!
- Various potential alternatives exist on the market but well-conducted **hazard assessments** and **technical feasibility testing** are key to find the right alternatives, avoiding regrettable substitution!
- **Functional substitution**: the function of the substance is the starting point, not its chemical structure/class → broader range of alternatives are considered
- FLAREX addresses these aspects, with **active involvement of stakeholders**, including centres of expertise and textile manufacturing companies
  - Approach recommended by ECHA in its substitution strategy

# Elimination, substitution, ...



Source: NIOSH

# Info on chemicals and PACT: early warnings to avoid regrettable substitution



PACT: [www.echa.europa.eu/pact](http://www.echa.europa.eu/pact)

Info on chemicals: <https://echa.europa.eu/information-on-chemicals>

[echa.europa.eu](http://echa.europa.eu)

EU (European Commission with Member States and the Parliament) approves Annexes  
ECHA publishes the Candidate List

# Stakeholders engagement is key: examples of substitution supply chain workshops

- [Chrome plating](#)  
Finland, January 2017 and January 2019
- [Flame retardants in home textile](#)  
Belgium, 16 January 2018
- [Durable water and oil repellents in textile](#)  
Belgium, 5 June 2018
- [Antifouling paints in recreational boats](#)  
the Netherlands, 5 October 2018
- [Chrome plating](#)  
Germany, 14 January 2019
- [Bisphenols in thermal paper](#)  
Belgium, 26 March 2019
- [In-can preservatives/chromates/cleaning-chemicals](#)  
Wien, 30-31 January 2020
- [Substitution in textiles](#)  
Paris, tbd 2020

## Online introductory training on analysis of alternatives to hazardous substances

Intended for a range of analysis of alternatives practitioners – both new and experienced – working in authorities, industry and NGO organisations

- Introduction – Makes the case for informed “substitution thinking” and introduces the training
- S1: Scoping the assessment
- S2: Identifying and screening alternatives
- S3: Hazard and exposure
- S4: Cost and technical performance
- S5: Making and implementing decisions

<https://echa.europa.eu/online-training-on-analysis-of-alternatives>



## Some networks, information and funding sources

Platform for buyers and  
sellers of alternatives  
[ChemSec Marketplace](#)



- EU and national innovation funding programmes (Horizon Europe, LIFE, etc.)
- Substitution supply chain workshops
- Enterprise Europe Network

[Zero Discharge of Hazardous  
Chemicals](#)



Substitution support portal  
[Subsportplus](#)

# ECHA's web page on substitution: a lot of resources available

Companies in the EU are increasingly substituting away from hazardous chemicals and manufacturing processes to safer chemicals and greener technologies. This can bring substantial benefits to the companies, the environment and the health of workers and consumers. It can also have a significant positive impact on the implementation of a circular economy.

## ONLINE TRAINING



Introductory training on analysis of alternatives to hazardous substances.

▪ [Read more](#)

### Supply chain workshops

Supply chain workshops are intended to advance research, evaluation and adoption of safer chemicals.

### Networks

Collaborative networks play an important role in coordinating and advancing innovation and informed substitution.

### Funding and technical support

Facilitating access to technical support and additional funding is critical to boosting substitution away from hazardous chemicals.

### Data to prevent regrettable substitution

More effective use of REACH, CLP and BPR data in performing hazard and risk assessment of alternatives can help prevent the instances of regrettable substitution.



Why substitute?



How to substitute?



Real-life cases



Find substitution partners



News and activities

<https://echa.europa.eu/substitution-to-safer-chemicals>

# Status of PFAS restrictions in textiles



# Status of PFAS restrictions in textiles

- The concern with PFAS:
  - highly persistent substances
  - contamination to groundwater and drinking water
  - certain PFAS accumulate in the bodies of living things and cause toxic effects such as toxic for reproduction and the development of foetuses, cancer or suspected endocrine disrupters.
- PFAS currently subject to several regulatory initiatives for different sectors, including textiles:

See overview presentation from OECD Webinar of 25 February 2020:

<https://www.youtube.com/watch?v=IU2bpFyw3lc&feature=youtu.be>

And ECHA's PFAS webpage:

<https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas>



## Joint Member States initiative on a wide PFAS restriction proposal

- The Netherlands and Germany, with support from Norway, Denmark and Sweden, have shown interest in preparing a restriction proposal to cover a wide range of PFAS uses, **including on textiles**.
- They are organising a **call for evidence** to get more information on uses, tonnages, alternatives, etc. from 11 May **until 31 July 2020**:

<https://www.reach-clp-biozid-helpdesk.de/SharedDocs/Meldungen/DE/REACH/2020-05-08-RMOA-PFAS.html>

## Take home

- Several substances of concern used in textiles are undergoing regulatory actions: time to think about elimination, substitution and safe & sustainable by design!
- Watch the regulatory developments and contribute to the surveys and public consultations
- Inform yourselves about the hazard profile of the substances you use and use available tools to find alternatives