

# Kiertotalous kemikaaliturvallisuuden näkökulmasta

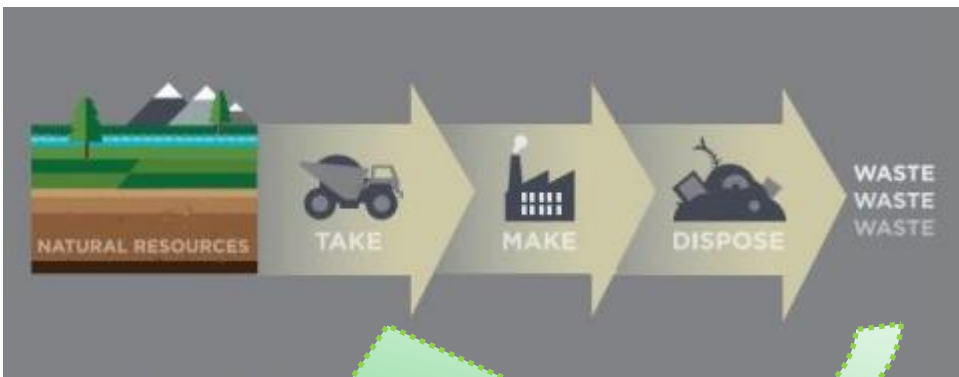
**SYKE:n seminaari**

24.11.2016

Jukka Malm



# Linear economy vs. circular economy



**Product design, durability  
reuse, repair**

# Avoid solutions becoming problems

DecaBDE



Lead



Wood  
preservatives

PFOS/PFOA



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## EU considering health issues of rubber in artificial pitches

Claims that rubber infill in synthetic pitches has toxic material that causes cancer

© Mon, Feb 22, 2016, 01:00

Johnny Watterson



The Health and Safety Authority in Ireland is aware of what has become a polarising debate around claims and counter-claims that the rubber crumb is hazardous

Rubber infill, used widely in the construction of synthetic turf pitches throughout Ireland, is being considered by the EU as a product that should



### Second Captains

Barney Ronay on the very un-British rise of Andy Murray to world number 1



### Most Read in Sport

- 1 Gerry Thornley: Time to address stampeding elephant in rugby room
- 2 Joe Schmidt to learn player availability over next 48 hours
- 3 Jamie Heaslip shrugs off Kiwis' barrage and braces for Wallabies clash
- 4 PSG's Serge Aurier denied access to Britain for Arsenal clash
- 5 Weary Aussies on upward curve ahead of Ireland game

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# **REACH Regulation**

**- Principles, processes, achievements**



## Principles of REACH

- Industry responsible for safe manufacture and use
- Deal with the 'burden of the past' with a systemic program for registration of 'old' chemicals
- Get adequate information on hazards while minimising the use of experimental animals and the costs
- Promote substitution of hazardous substances with safer alternatives
- Authorities will focus on substances of highest concern



# REACH and CLP – main processes and actors



## Registration Self-classification

Facilitated by ECHA, industry gathers information and ensures management of risks



**Member States**

## Evaluation

- Dossier evaluation
- Substance evaluation

ECHA and MSCAs control and request further info



## Authorisation Restriction Harmonised C&L

Commission, with support of ECHA and MSCAs, applies community wide risk management measures

## Risk management: authorisation

- Substances of very high concern (SVHCs): CMRs, PBT/vPvB or 'equivalent concern'
- Identification of substance in two steps:
  - Inclusion on the 'Candidate List' by ECHA
  - Some transferred on the 'Authorisation List' (Annex XIV of REACH) by Commission
- Once on the Authorisation List, the substance can only be marketed or used after 'sunset date' if authorised by the European Commission.
  - COM decides based on an ECHA opinion





## Substances in Articles

- Registration information also covers incorporation of a substance into articles
- Notification to ECHA if articles contain
  - Substances on the Candidate List (SVHCs)

- Only 359 notifications for 38 Candidate List substances (total 169)!
- 'Chemical risk' most reported RAPEX alert in 2015



169

Substances of Very High Concern

460

Risk management proposals

1 500

Dossiers for HPV chemicals checked for compliance

14 000

Substances registered under REACH

120 000

Substances classified by industry

2 million

Study summaries on properties and effects of chemicals



**REACH links with  
Sustainable Chemistry and  
Circular Economy**



# Commission Action Plan

## Circular economy & chemicals

### **Analysis and policy options (2017)**

- to address the interface between chemicals, products and waste legislation,
- including how to reduce the presence and improve the tracking of chemicals of concern in products

### **Strategy on plastics in the circular economy (2017)**

## Sustainable chemistry

- Active use of REACH data in innovation and product design
  - Know your chemicals portfolio
  - Know and manage the risks, throughout the life-cycle
  - Integrate safety into your R&D
- Be proactive, not reactive
  - Is my substance on an list?
    - ✓ Do the properties of my substance trigger listing?
  - Avoid regrettable substitution
    - ✓ Know the properties & risks of your substitute



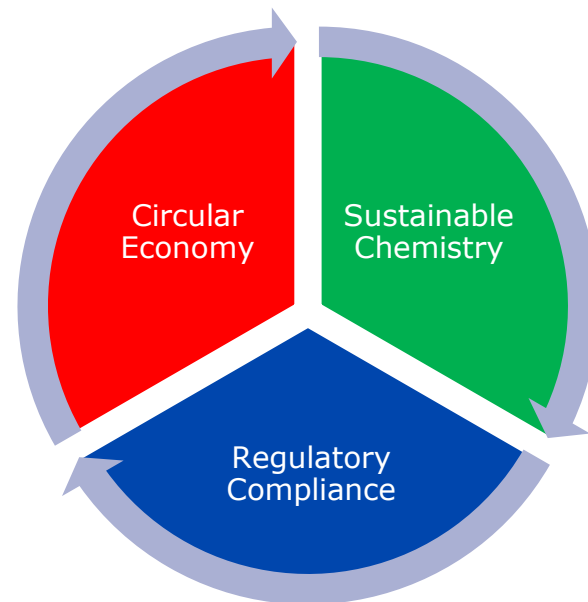
## REACH in support of circular economy

- Sustainable use of secondary raw materials and bio-based materials
  - Via REACH chemical hazards and risks should be known
  - Ensure recyclability of materials/products
  - Minimise the circulation of SVHCs in the society
  - Carrots: proactive use of REACH data by companies
  - Sticks: use of restrictions and authorisation
- Tracing and tracking hazardous substances in products/articles
  - And informing consumers
- Contributions to other policy instruments
  - E.g. Ecodesign, Green Public Procurement



## Many open questions, e.g.:

- How to track and trace substances in materials and products?
- How to assess the exposure from waste, recycling, and reuse?
- How to assess whether recycling is better than elimination, especially for SVHC/POP like substances (criteria for recyclability)?
- What incentives there are for companies to better integrate chemicals safety into their product R&D?



## Conclusions

- REACH compliance and sustainable chemistry & circular economy are interlinked
- REACH investment can be capitalized to benefit these (and other) policy sectors
- Companies can integrate REACH compliance into their R&D and product design

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