

Ministry of Infrastructure and the Environment | Ministery of Economic Affairs | National Institute for Public Health and the Environment

Sustainable innovation of substances, materials and products

Activities of the Netherlands

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Sustainable innovation of substances, materials and products





Registration
Evaluation
Authorisation and
Restriction of Chemicals

Challenges

- REACH enforces substitution. However,
 - this process takes time
 - drawback of 'substance per substance approach' is regrettable substitution
- We need a more fundamental substitution
- How can companies become more proactive regarding substitution?
- Several activities in the Netherlands



Safe Chemical Innovation Agenda (SCIA)

- Calls aiming at developing alternatives are scarce in EU research programs
- Stakeholder consultation: which substances are problematic?
- Goal to obtain a widely supported research agenda with a short-list of substances for which alternatives are desired (results expected beginning of 2018)
- Request to EC to implement this topic in EU research programs



Bio-based alternatives for SVHCs

- Two studies by Wageningen University & Research Centre (WUR)
- Development of bio-based chemicals is expected to increase
- Are there bio-based chemicals with replacement potential and a better hazard profile?
- 1. Bio-based replacement potential of hazardous chemicals (report 2014): short-list of biobased alternatives for SVHCs that could be produced at a short-term
- 2. Bio-based alternatives for polar aprotic solvents
 - existing and emerging bio-based product streams
 - new bio-based chemicals
 - selection of potential subsitutes of polar aprotic solvents
 - Results expected before the end of 2017



REACH as an opportunity

- Governmental program: stimulating regulation for sustainable innovation
- REACH often mentioned by companies as an obstacle, especially by SMEs
- WUR report on bio-based alternatives for SVHCs (2014) used as a starting point for interviews
- Experiences of NL companies with bringing alternatives to the market

Experiences bringing alternatives to market

Company:

- Changes in strategy
- Competition with own portfolio

Known suppliers not very innovative

Registration is expensieve and time-consuming

Unknown with REACH & experimental space

Whole chain between demand and supply

Difficulties with regulations:

- Anticipating on changes
- Certification is expensive and problematic for deviant products
- Waste vs. product regulation
- Bio-based vs. policy on energy transition

REACH as an opportunity

Substance Unknown identity is - R&D are problematic (UVCBs) - Operat

Unknown demand:

 R&D and compliance dept. not connected

Testing in

applications costs

money and time

 Operating in different markets

Substances withdrawn from market because of registration costs: less choice

Market:

- Business is not right (price, functionality)
- Different specs
- Nobody wants to be the first one

Financing:

- Valley of death?
- Registration fee?
- Costs consultant?

What way?



- 1. Dissiminate and utilize current opportunities
 - Make people aware of the opportunities in REACH, tell about inspiring substitution initiatives
 - Make existing substitution tools and databases easy to find
 - Make it clear where to find finance for projects on substition
 - Focus on both big and small companies
- 2. Bringing demand and supply together
 - Branche organisations are not in position to fulfill this role
 - New role? *The substitution broker.* Insight into science and business
- 3. Learning while doing: a specific substitution case
 - Government can provide scientific knowledge, facilite the dialogue, (support on finding) finance, support on obstructing regulations, ambassador for innovations
 - Involvement of whole supply chain. Important role for the big customer?
 - How to find? Please share experiences with us!

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