



*Polluted Soil Seminar, Riga*



## Phasing out hazardous substances upstream by eco procurement



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## Outline of presentation

- Why is Trafikverket in the Infraguider project?
- Infrastructure material and products in a lifecycle perspective
- Lessons learned, examples from Trafikverket
- What does REACH do for us and what do IM:s need to manage themselves?
- How can eco procurement prevent future contamination and future costs?
- Results of the Infraguider project



## InfraGuidER – scope and goal

- Coordinated Action to improve environmental performance of railway infrastructure
- Identifying IM:s key environmental functions
- Identifying environmentally significant material flows
- Harmonising eco procurement requirements for significant materials





# Trafikverkets interest in InfraGuidER

- Life cycle management of infrastructure material and products is a significant aspect
- Prevent future contamination and future costs, reduce climate change and improve environmental performance
- Infrastructure material is on an international market
- Difficult for one single IM to influence the market
- Goal from the Swedish government to increase environmental requirements in public procurement – part of EU's IPP (Integrated Product Policy)
- Good example of "UIC code 345 Environmental Specification for new rolling stock"



## **Banverkets environmental strategy**

**- life cycle management of infrastructure material**

”Develop and implement environmental requirements for procurement of strategic infrastructure material”

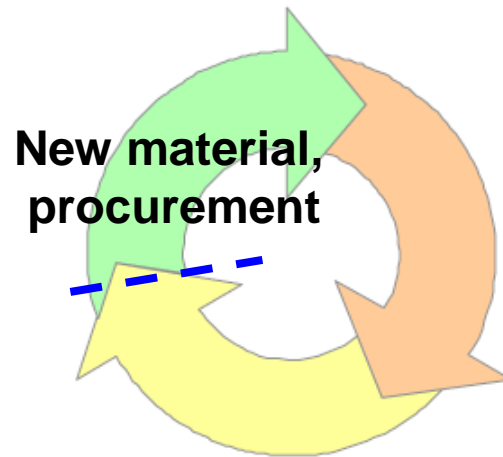
”The use of materials in the railway transport system shall be *energy and resource efficient* and the pollution of nature from *environmentally harmful substances* in the infrastructure shall decrease”





# Infrastructure lifecycle

New infrastructure



Use of infrastructure



Infrastructure maintenance



Recycling, reuse,  
waste management





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# Significant environmental aspects

Natural resources



Hazardous substances



Climate change and energy efficiency



## Lessons Learned 1 – Thermal insulation

- Between the years of 1977-1997
- 130 ton of HBCD, Hexabromocyclododecane (now on REACH candidate list)
- 390 tonnes of freones, CFC and HCFC (now forbidden by law)

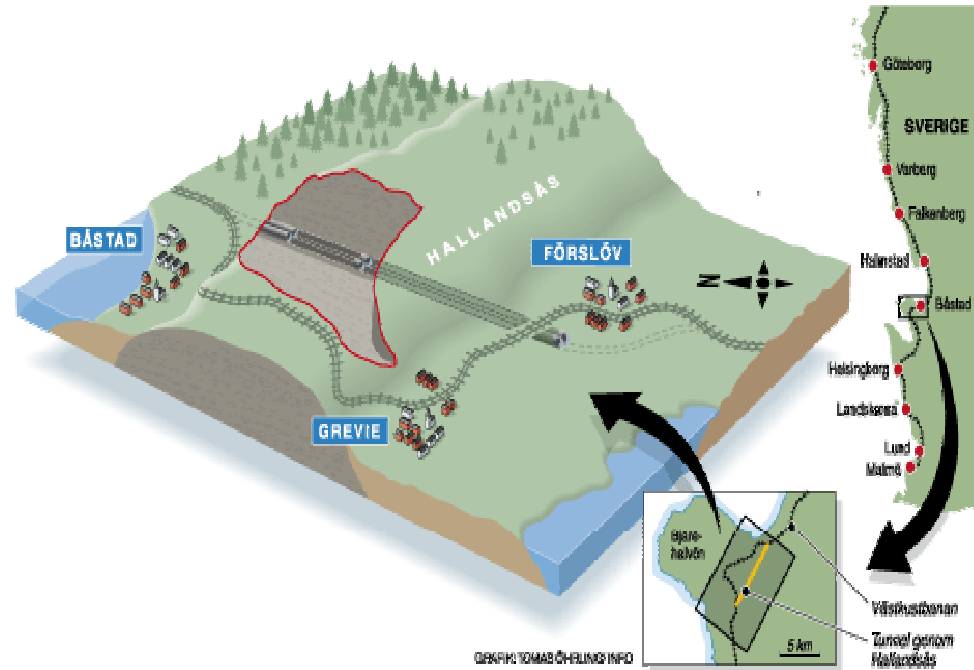


- Environmental impact
- High costs for waste disposal, classified as hazardous waste
- Polluted soil, HBCD under the insulation



# Lessons Learned 2 - Hallandsås project

- 1997 project was stopped
- Rocha Gil a substance used for chemica injection containing acrylamide had leaked into water
- Dead fishes, dead cows
- Problems with workers health
- Huge economic consequences including a 6 year delay



- All chemicals are now reviewed before usage
- 1500 products per year



## The REACH Regulation EC 1907/2006

- Registration, evaluation, authorization and limitation of chemicals

- REACH provides information



- The rest is up to you!



## The Candidate List, Annex XIV

- with substances of very high concern (Art. 57 REACH)

- Carcinogenic, mutagenic and toxic for reproduction
- Persistent, bioaccumulative and toxic
- Endocrine disrupting
- Eventually phase out the use of substances on the candidate list
- Very slow process



More than 1500 substances of very high concern on the EU market

Today 38 is on the candidate list – 2013 about 150-200 substances



# Benefits of Eco Procurement

- Improve environmental performance
- Prevent future environmental impact and costs
- Lower costs in a LCC-perspectiv
- Goals – help to fulfill
- Laws and regulations – comply with current and future legislation



# Eco-Procurement Guidelines of Infraguider

- Integrates eco-procurement into ordinary business procurement process
- Comply with EC Directive 2004/18/EC on public procurement
- Is inspired by:
  - European Comissions handbook "Buying Green" – a handbook on environmental public procurement
  - EU´s Integrated Product Policy, IPP, which states that environmental procurement should increase
  - Ecodesign Directive (2009/125/EC)
  - UIC Code 345



# Infraguider model

- Identifies environmental performance indicators (EPI:s) for significant materials/products
  - Ballast
  - Sleepers
  - Steel/Rail
  - Concrete
  - Cables
  - Electric and electronic components
  - Chemical products
- Suggests a model including
  - Mandatory supplier requirements (selection criteria)
  - Mandatory requirements for the product (technical specification)
  - Award criteria



## Summary and Conclusions

- Energy efficiency/Carbon footprint, **hazardous substances** and natural resources are significant aspects
- Focus on controlling the inflow to avoid future costs and environmental pollution
- REACH will help, but not do the job for you
- Include environmental aspects in product design, technical specifications and in the procurement process
- Start a dialoge to communicate requirements with suppliers
- Always consider Life cycle perspective
- **Infraguider will contribute!**

