Advancing safer substitution: lessons learned

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Advancing safer substitution – multiple perspectives….

Education and Basic R&D

Supply chain needs and applications and innovation policy

Adoption in industry, particularly SMEs

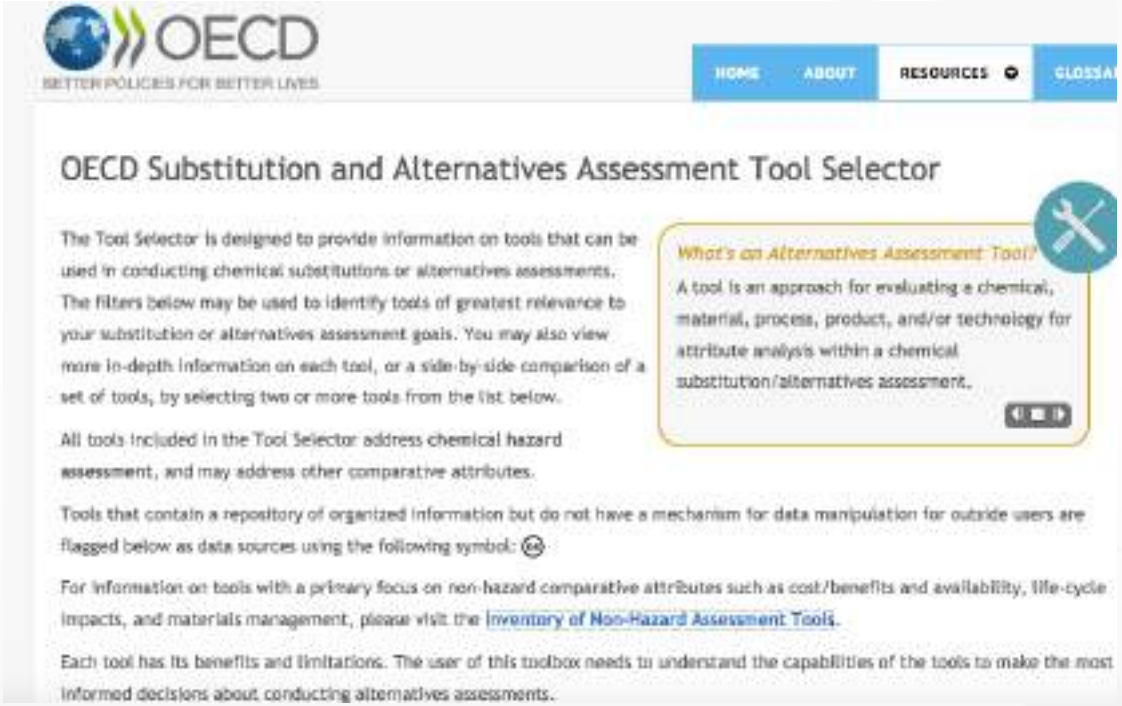
Building multi-disciplinary science and practice

Key needs to support safer substitution

- Consistent frameworks/data/tools for evaluating alternatives
- Support for assessment/adoption/collaboration
- Research on new alternatives
- Policy incentives and drivers linked to development and adoption of safer substitutes

Frameworks/Tools/Data to support Safer Substitution

- Need consistent framework/steps to consider in the alternatives assessment process
- Need to fill in data gaps, particularly in hazard and exposure potential information
- Need improved methods for evaluating lifecycle impacts, performance, and for decision-making
- Need tools to translate data to „actionable“ information.



http://www.oecdsaatoolbox.org/

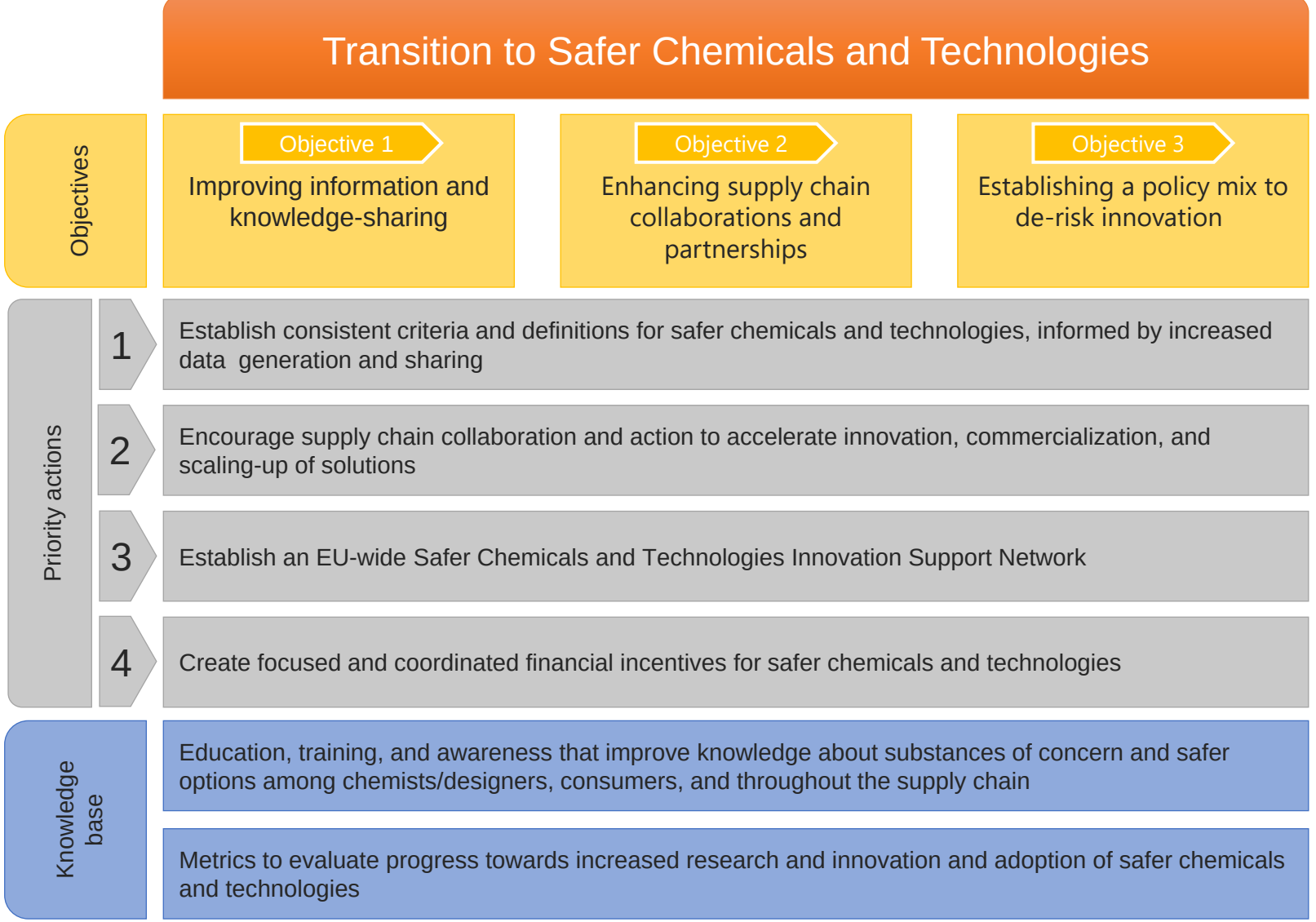
Supporting safer substitution

- Adoption is complex and requires research and technical support – challenges even greater for SMEs
- Must consider potential health and safety or other trade-offs at adoption phase
- Need ways to connect supply chain actors in demonstration and understanding technical needs
- Where alternatives are not available, support for R&D is critical

Promoting Safer Alternatives – The MA Toxics Use Reduction Institute

- Train professionals on chemical hazard, performance and cost assessment
  Provide tools - P2OASys (*www.turi.org/p2oasys*)
- Create supply chain partnerships to solve common toxics challenges
- Evaluate alternatives to common uses of toxic chemicals
- Fund research on and adoption of safer, effective and affordable alternatives to toxics

www.turi.org



Wood and LCSP: Chemicals Innovation Action Agenda, 2019
https://publications.europa.eu/en/publication-detail/-/publication/2d7fc4d1-96f6-11e9-9369-01aa75ed71a1

Ensuring supportive policy

- Need clear and consistent signals to the marketplace (regulatory or market-based) on the chemical functions/classes/applications of concern to provide early indications of the need to substitute/innovate and mandates to thoughtfully evaluate alternatives.

- Drivers must be supplemented by sufficient and sustained funding, infrastructure, and infrastructure to support the developmeht and adoption of safer alternatives

Thank You!

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For more information, visit:

Green Chemistry & Commerce Council (GC3) | www.greenchemistryandcommerce.org

Association for the Advancement of Alternatives Assessment (A4) | www.saferalternatives.org

Toxics Use Reduction Institute (TURI) | www.turi.org