

Willkommen
Welcome
Bienvenue

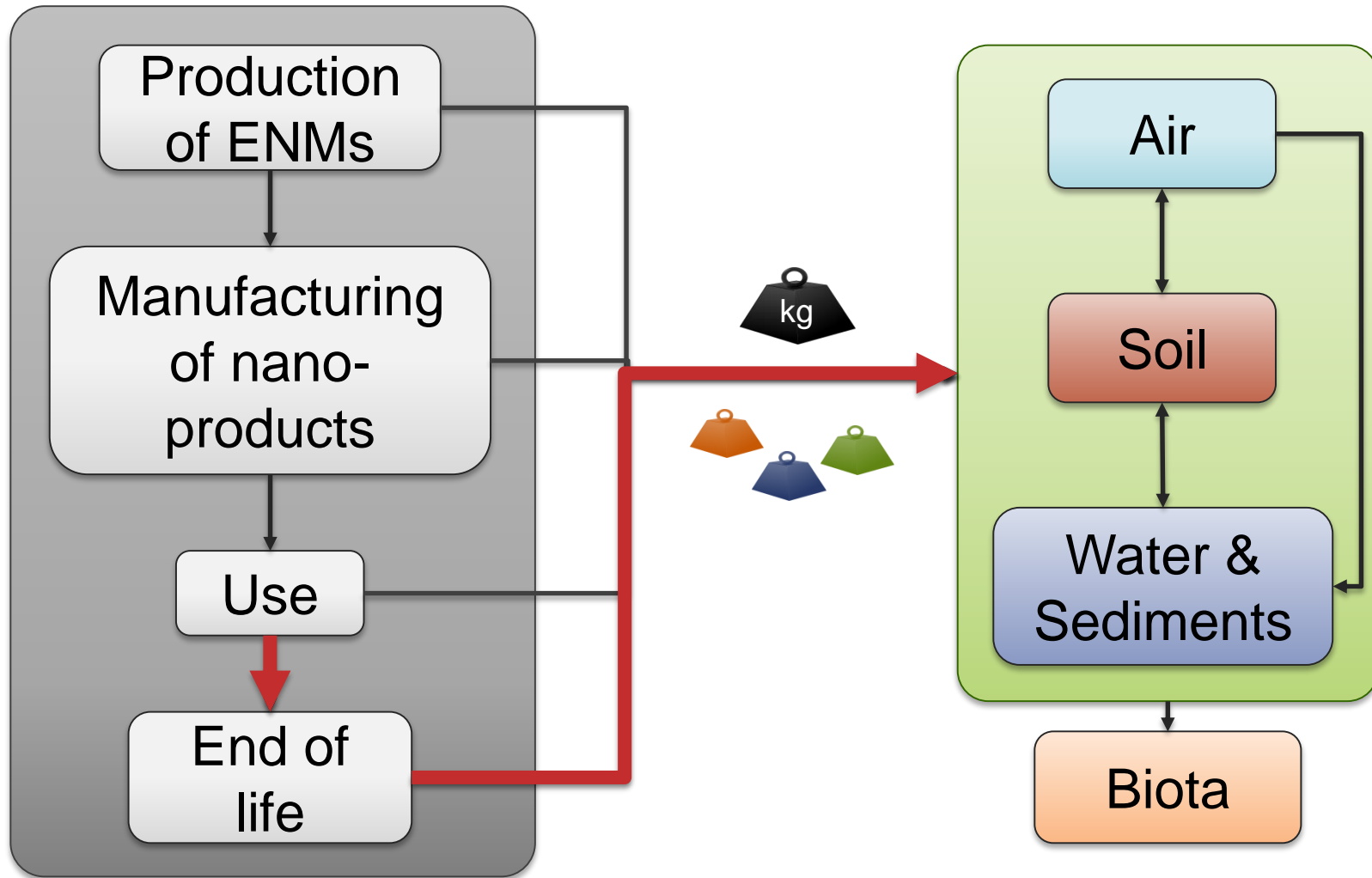


FLOWS OF ENGINEERED NANOMATERIALS TO WASTE TREATMENT

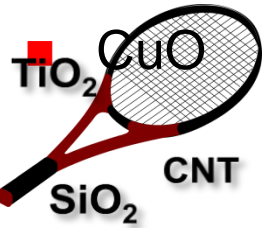
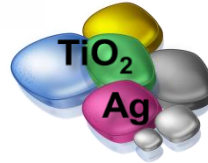
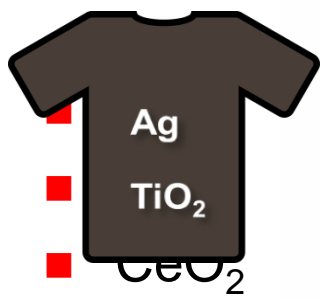
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SCOPE AND OBJECTIVES

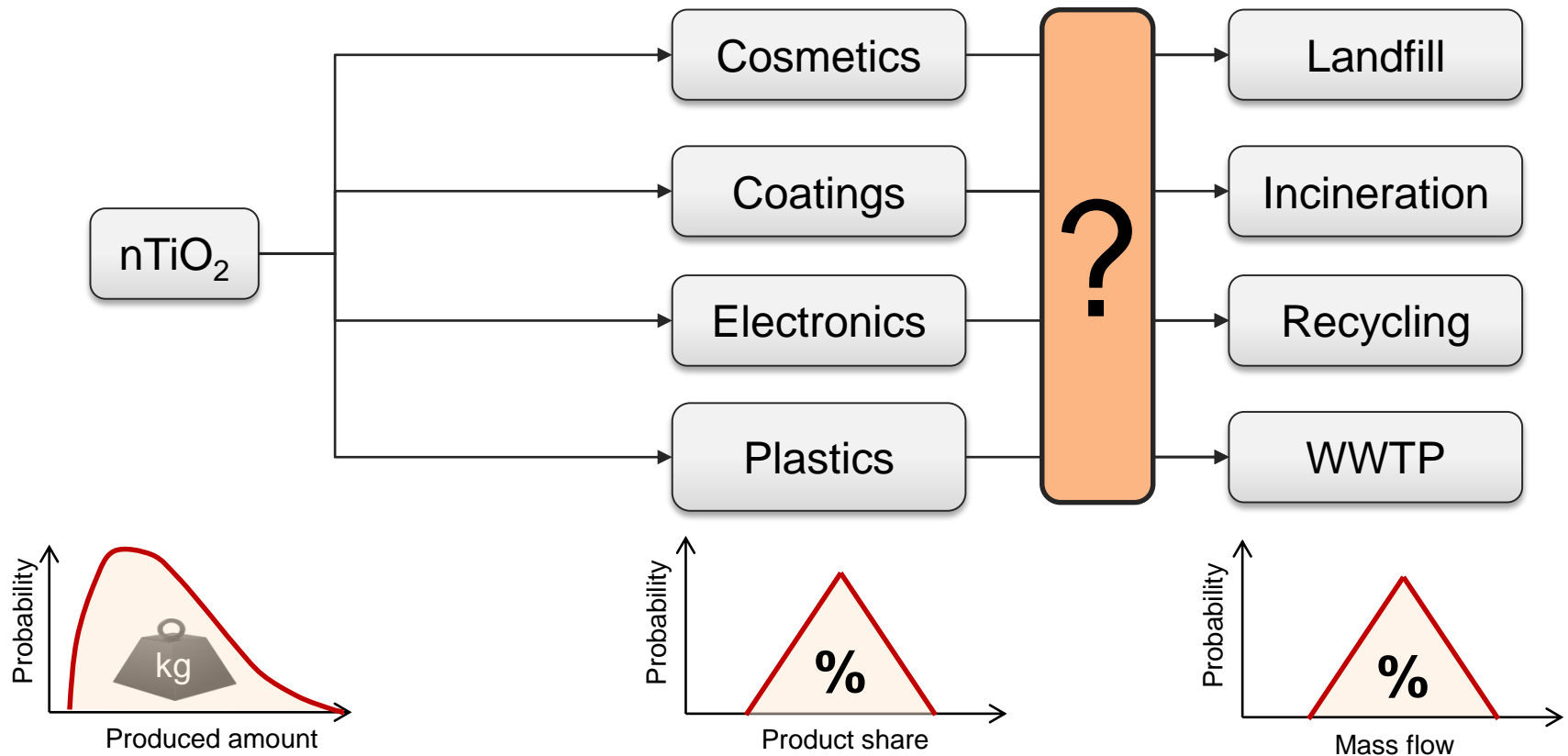
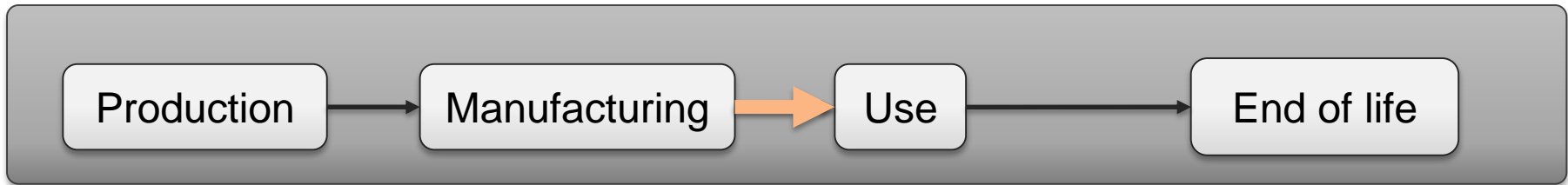


SCOPE AND OBJECTIVES

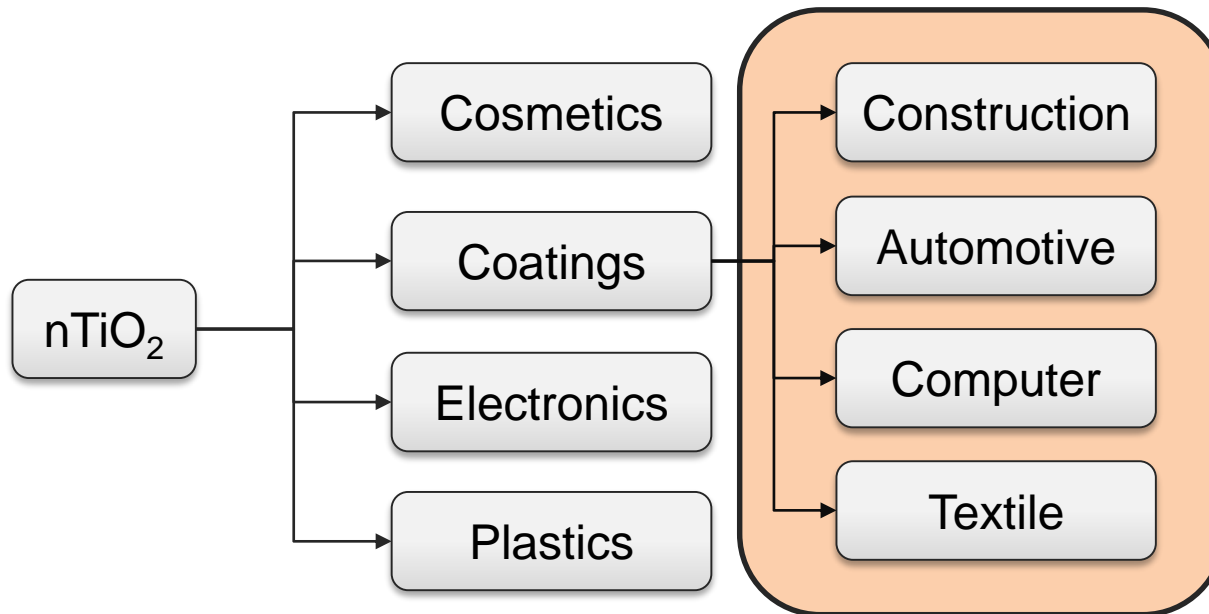
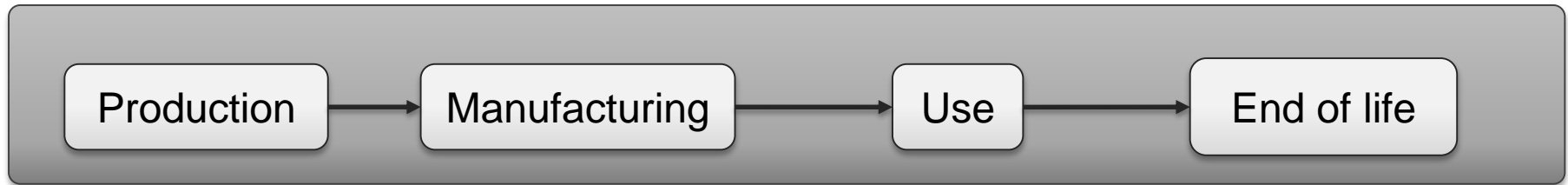


METHOD – PREVIOUS MODEL

Sun et al. 2016



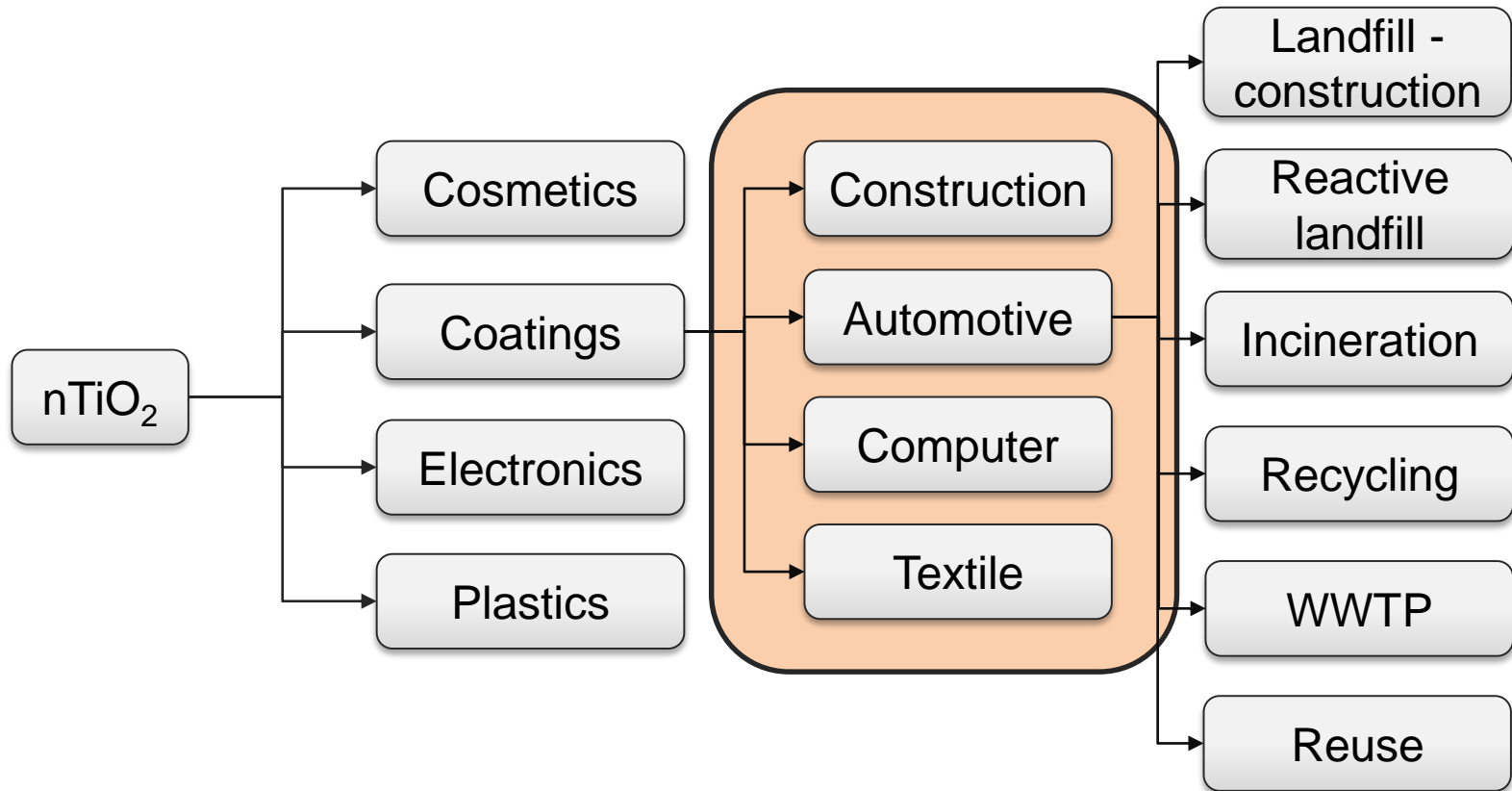
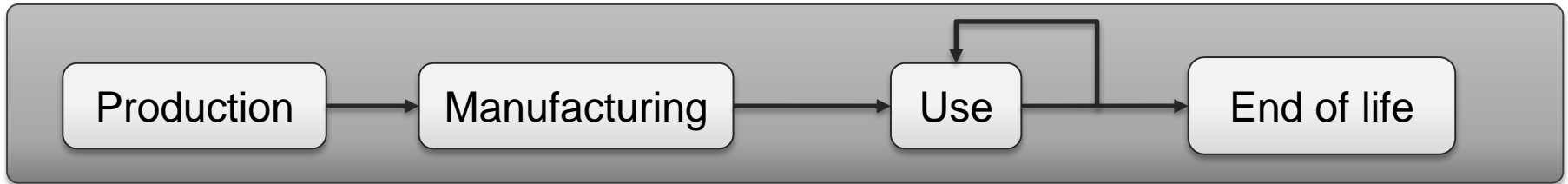
METHOD – NEW MODEL



- Various sources
 - Consumer product inventories (Nanodb,...)
 - Commercial platforms (Amazon,...)
 - Google
 - Scientific reviews

- Application of quality criteria
 - Include at least 20% of the product categories considered
 - Written/Updated since 2012

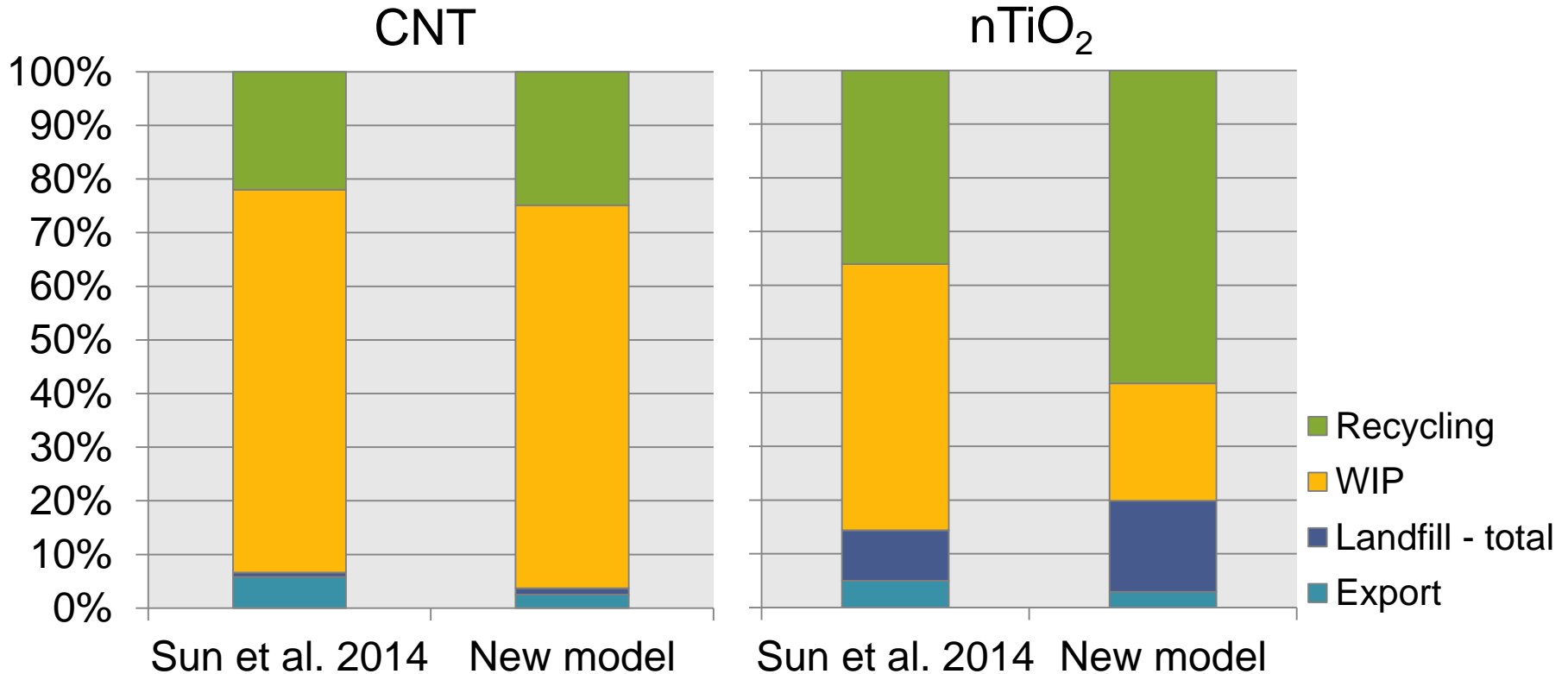
METHOD – NEW MODEL



- Various sources
 - Reports from government organisations
 - Eurostat database

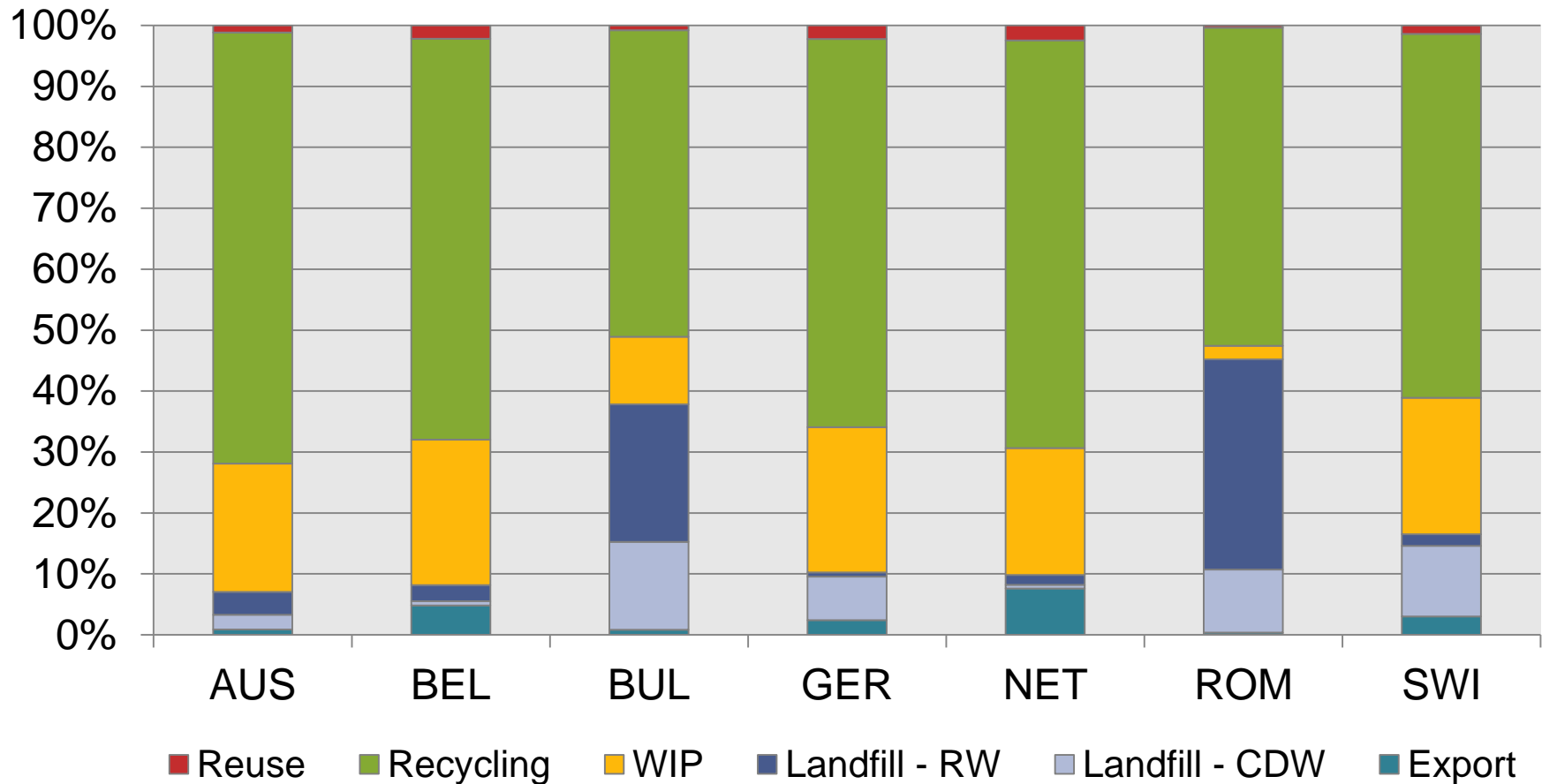
- Data (un)availability
 - Different years of reference
 - Different waste categories

Normalised flows

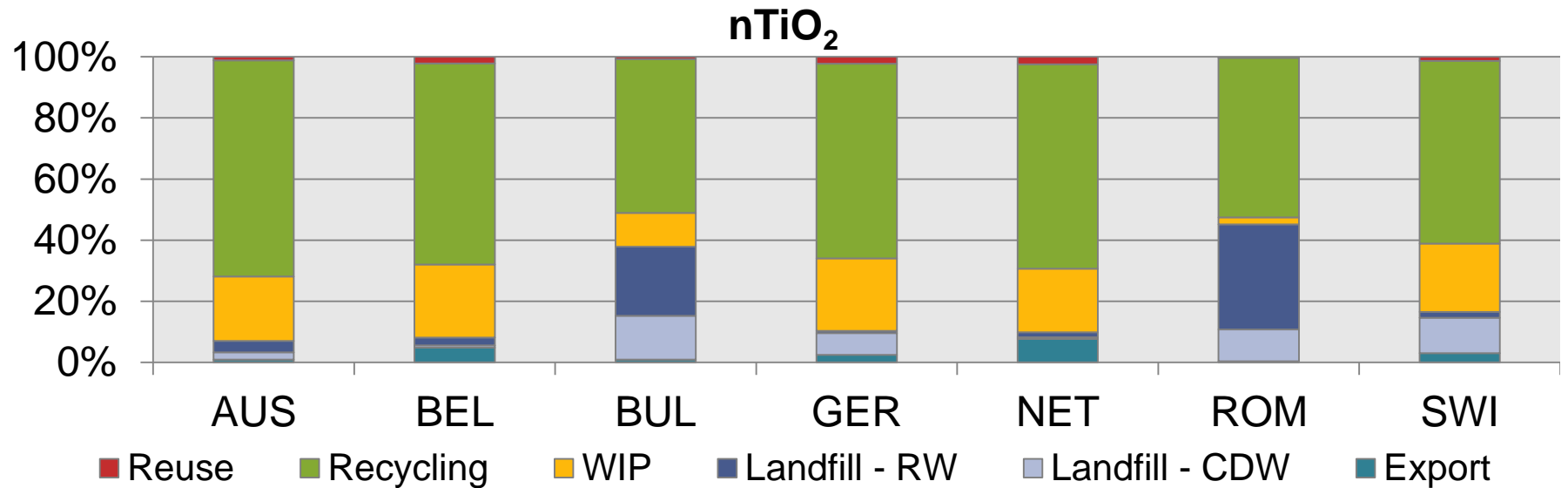
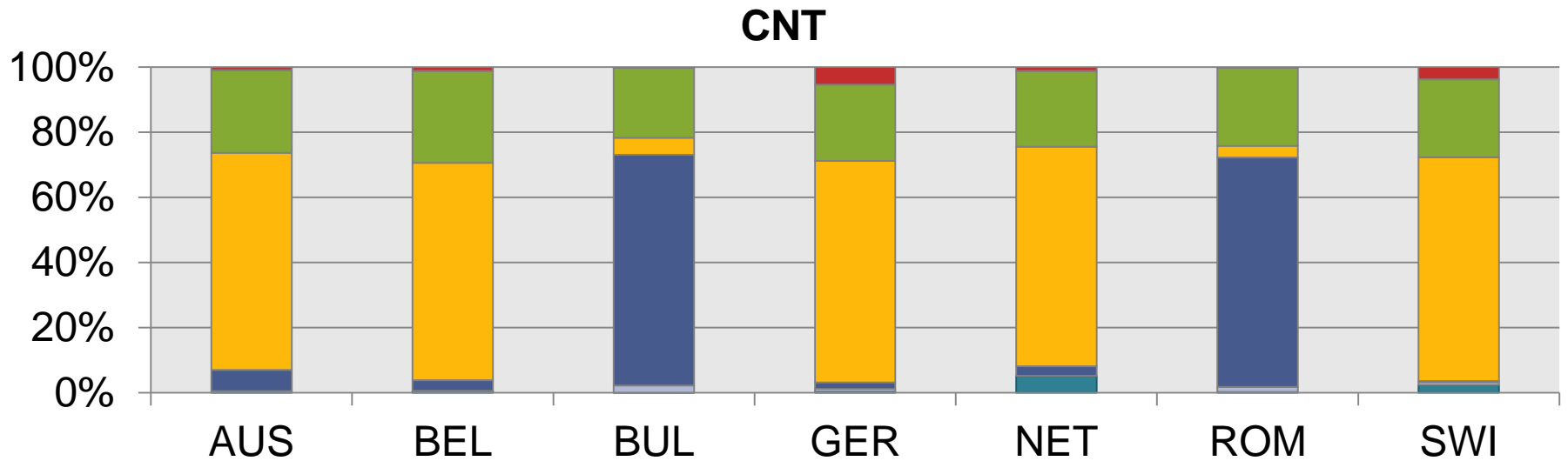


- The refinement of product allocations can change the results significantly

Normalised flows



■ The national scale is relevant



- The product allocation is a crucial step
- The national scale is more relevant than the European scale
- Shares to recycling are the highest
 - Focus on these processes when assessing the flows out
- Forms of the outflows:
 - Pristine
 - Matrix-embedded
 - Transformed
 - Dissolved

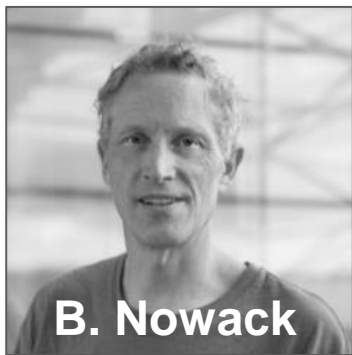
THANK YOU!



Fate and Exposure models for you - www.nanofase.eu



Materials Science & Technology



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