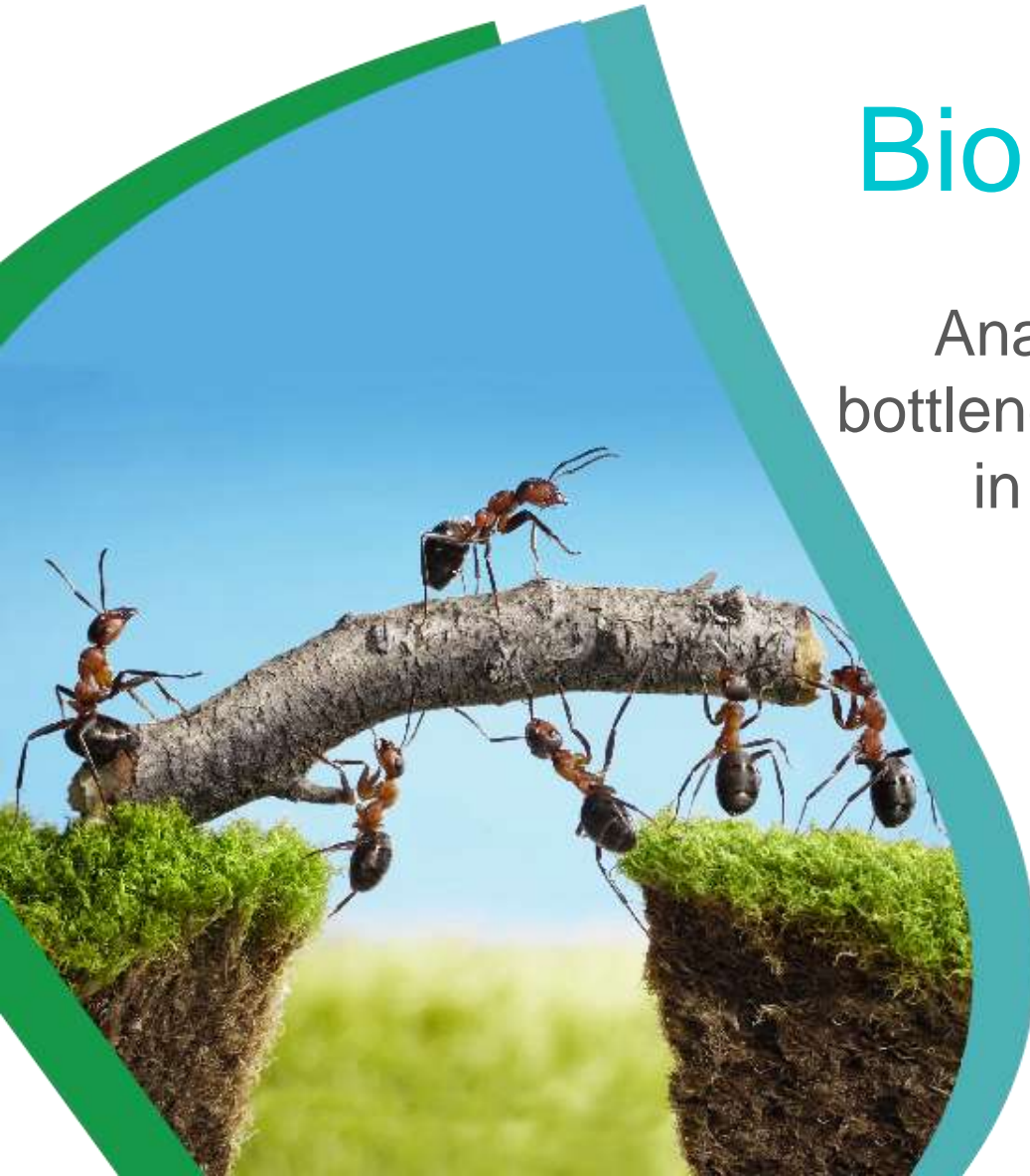


# Bio Base NWE

Analysis report on the  
bottlenecks SMEs encounter  
in the bio-economy

September 29 2015



# Questionnaire

- Survey
  - 43 SME's
  - Belgium, North of France, UK, Ireland, Germany, Netherlands
  - Industrial biotechnology, bioenergy, biochemistry, food industry
  
- Similar survey as the BioTic project (large industries)

Category	Specific barrier	Please indicate if this is a barrier for your company/business on a scale from 0 (no impact) to 5 (high impact)
Investment barriers	<p><b>Capital requirements</b></p> <ul style="list-style-type: none"> <li>• availability of public R&amp;D funding (regional/national/European)</li> <li>• public support for pilot and demonstration activities</li> <li>• access to finance for start-ups (e.g. seed funding, VC funding)</li> <li>• access to finance for SME's</li> <li>• financial support for new production facilities (cheap loans, subsidies, etc.)</li> </ul> <p><b>IE and Biobased sectors perceived as sector with high investment risk</b></p> <ul style="list-style-type: none"> <li>• lack of investor confidence in industrial biotechnology</li> <li>• lack of viable tangible products &amp; biobusinesses</li> <li>• slow "turnover to investment" time lag for IED</li> </ul>	
Infrastructure related barriers	<p><b>Logistics</b></p> <ul style="list-style-type: none"> <li>• collection of feedstock (biomass)</li> <li>• transport and distribution of biomass</li> <li>• low number of operational biorefineries</li> </ul>	
Feedback related barriers	<p><b>Securing large quantities of biomass</b></p>	

## 1. Feedstock supply

- Cost
- Infrastructure & transport
- Trade barriers
- Seasons
- Quality

## 2. Production

- Yield, productivity and robustness
- Properties of some biobased products
- Scale-up
- Predictive models

## 3. Market

- Long-term regulatory & policy strategy
- Market penetration
- Consumer awareness
- Common understanding

## 4. Innovation systems

- Access to finance
- Cost of patents & IP legislation
- Demo & flagship support
- Collaboration between industry and academia
- Training

# Main hurdles identified (SMEs)



HURDLES	POSSIBLE SOLUTIONS
<p><b>Access to finance</b></p> <ul style="list-style-type: none"> <li>• Availability of R&amp;D funding</li> <li>• Public support for scale up activities</li> <li>• Need for seed and VC funding</li> <li>• Financial support for new production facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Make financial support possible for advanced pilot scale and demo tests</li> <li>• Support demonstration projects as “proof of concept”</li> <li>• Create specific funding programmes targeting innovative SME’s at national and regional level (cfr InnovFin)</li> <li>• Harmonise and simplify procedures for different funding instruments (Horizon, BBI, ESIF, Interreg, ...)</li> </ul>
<p><b>IPR issues</b></p> <ul style="list-style-type: none"> <li>•Lack of harmonised international IP regulation</li> <li>•High patent costs</li> </ul>	<ul style="list-style-type: none"> <li>• Simplification and harmonisation of patent procedures in Europe and globally</li> <li>• Member states and/or regions to financially support the costs for “obtaining, validating and defending patents and other intangible assets” for SMEs, as allowed by the State Aid Rules for Innovation</li> </ul>
<p><b>Hurdles for efficient collaboration</b></p> <ul style="list-style-type: none"> <li>• Lack of interregional collaboration</li> <li>• Need to create strong relationships in value chains</li> <li>• Difficulties to establish operational alliances between industry and academia</li> </ul>	<ul style="list-style-type: none"> <li>• Setting up interregional clusters (e.g. BIG-C megacluster)</li> <li>• Set up partnerships between regional governments</li> <li>• Publish joint R&amp;D calls with several regions</li> <li>• Projects should be set up in order to study and communicate synergies and complementarities between technologies, feedstock and waste, and to bring representatives from the different sectors together</li> <li>• Initiate specific bioeconomy networks at European and national level, building on existing sectorial networks</li> </ul>
<p><b>Public perception and awareness</b></p> <ul style="list-style-type: none"> <li>• Lack of awareness of the existence of biobased products and lack of understanding of the benefits, resulting in a lack of willingness to pay a premium</li> </ul>	<ul style="list-style-type: none"> <li>• More transparent communication in particular to the public at large and toward consumers and consumer organisations</li> <li>• Publish European success stories as separate case studies which are accessible to companies throughout Europe for their communications towards brand owners</li> </ul>
<p><b>Demand side barriers &amp; public procurement</b></p> <ul style="list-style-type: none"> <li>• Lack of dedicated framework promoting ALL biobased products</li> <li>• Lack of a “green public procurement” policy promoting biobased products</li> </ul>	<ul style="list-style-type: none"> <li>• Energy and material/products use should be treated at the same level</li> <li>• Environmental labels (EU EcoLabel, national and regional labels) should integrate biobased as an indicator</li> </ul>