BRIDGE – Biobased and Renewable Industries for Development and Growth in Europe

Realising the biobased economy potential in Europe
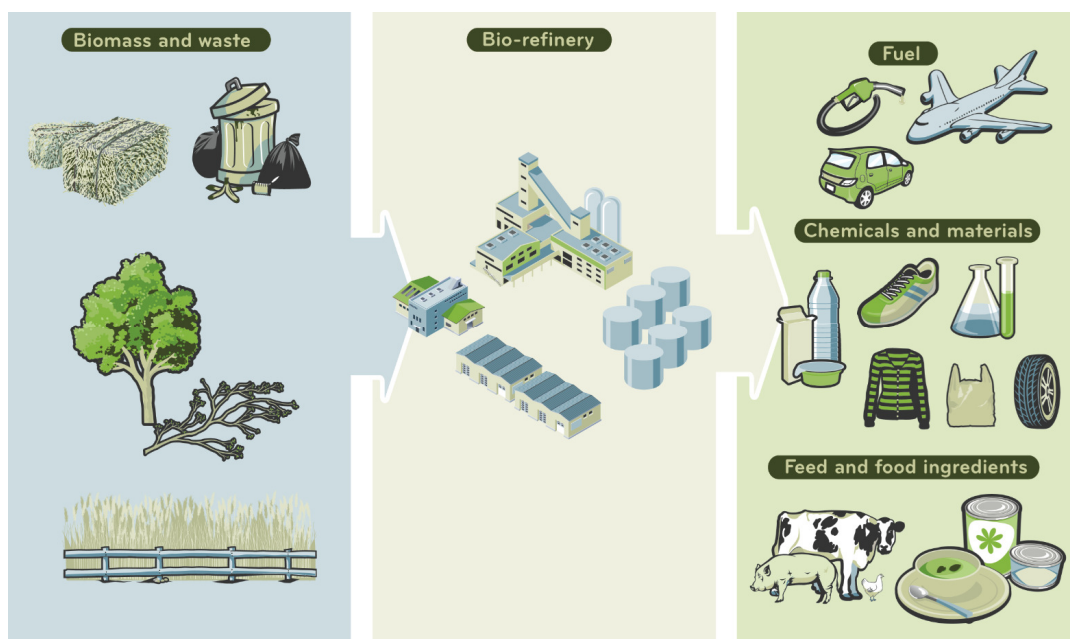
4 July 2013
Budapest

A PUBLIC-PRIVATE PARTNERSHIP ON BIOBASED INDUSTRIES

Kåre Riis Nielsen, European Affairs Director, Novozymes

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Biobased and Renewable Industries
for Development and Growth in Europe

Biobased Economy concept

What's in it for Europe?

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Growth

- A global biobased market estimated at €200 billion by 2020*

Jobs

- Create over 1 million jobs between 2010 and 2030 mainly in rural areas**

Energy and Products

- Reduce dependence on imports with locally sourced and produced goods and products***

Climate

- BRIDGE derived biobased products can achieve an average GHG emissions reduction potential of least 50% compared to fossil alternatives****
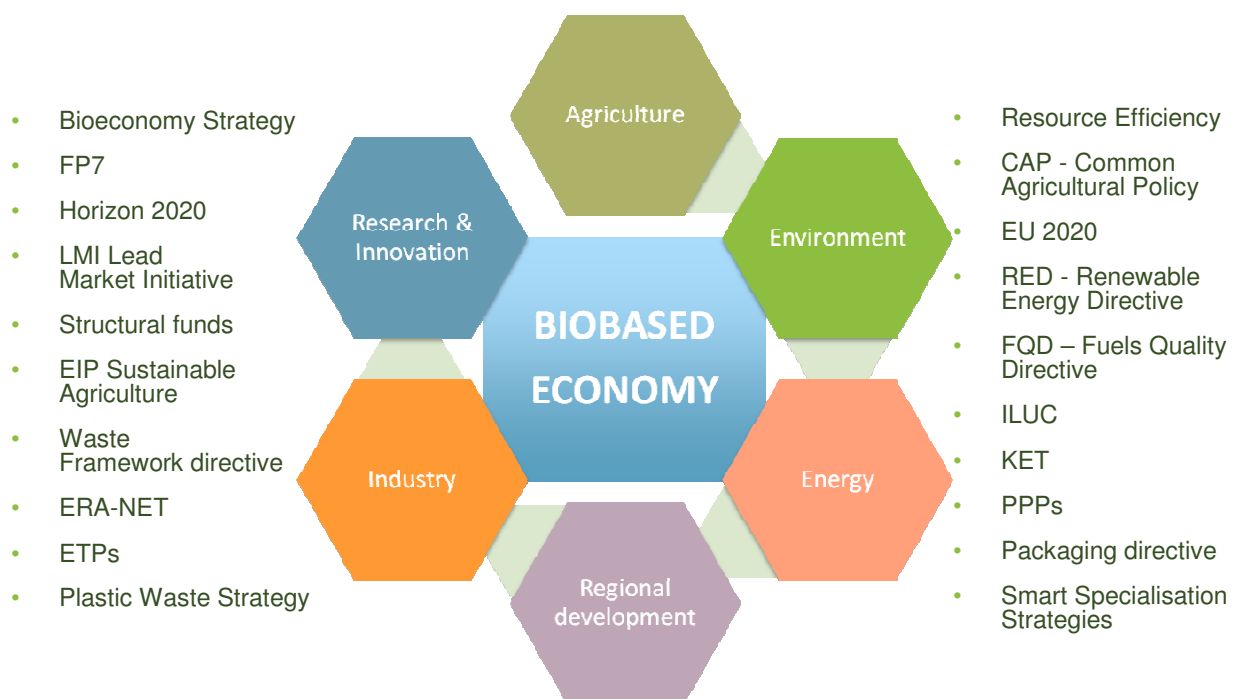
Sources:
* McKinsey / World Economic Forum
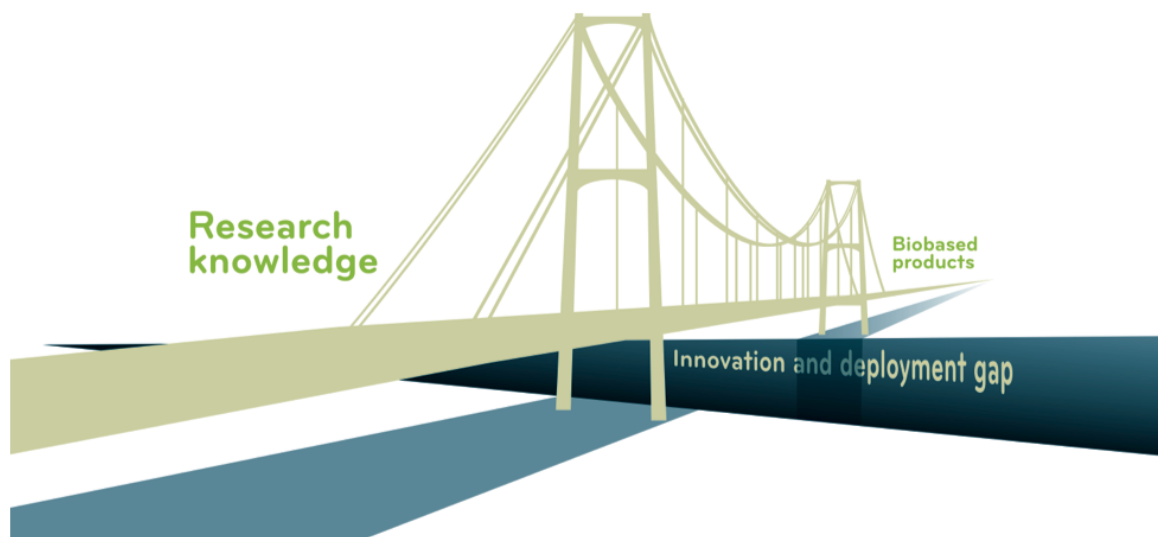** Bloomberg New Energy Finance
*** European Commission
**** BRIDGE 2020 Strategic Innovation and Research Agenda (SIRA)

3

Relevant EU Policies

- Bioeconomy Strategy
- FP7
- Horizon 2020
- LMI Lead Market Initiative
- Structural funds
- EIP Sustainable Agriculture
- Waste Framework directive
- ERA-NET
- ETPs
- Plastic Waste Strategy

Agriculture

Research & Innovation

Environment

Industry

BIOBASED ECONOMY

Energy

Regional development

- Resource Efficiency
- CAP - Common Agricultural Policy
- EU 2020
- RED - Renewable Energy Directive
- FQD – Fuels Quality Directive
- ILUC
- KET
- PPPs
- Packaging directive
- Smart Specialisation Strategies

Main EU challenge:
Overcoming the innovation & deployment gap

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Research knowledge

Biobased products
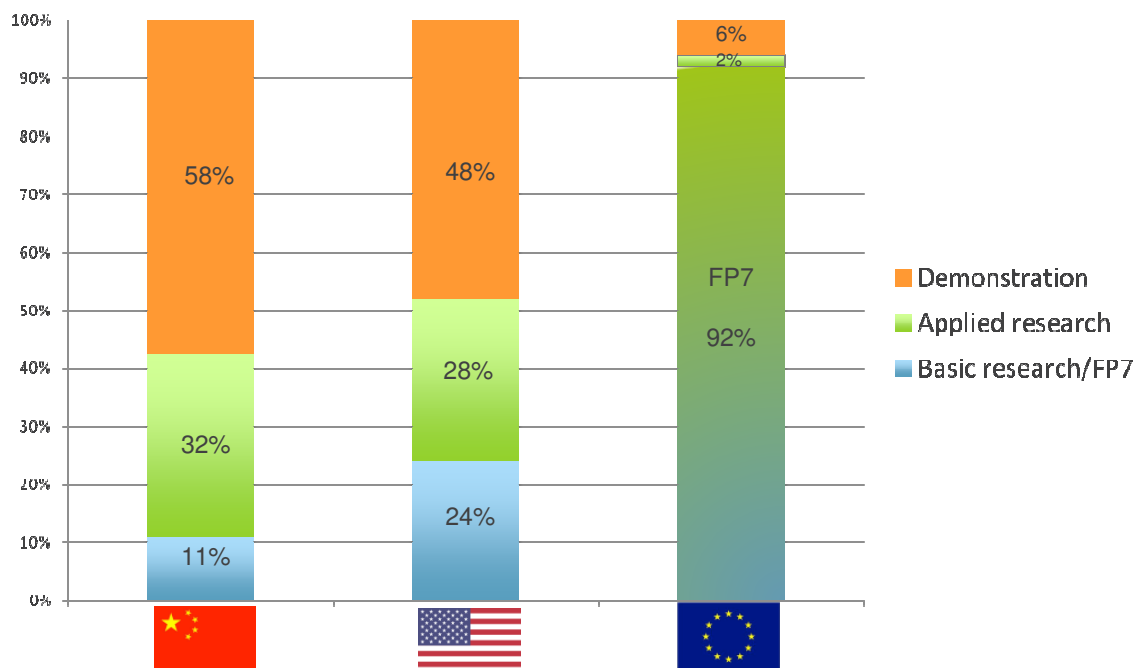
Innovation and deployment gap

Europe's ability to commercialise / produce high value products lies in its ability to reach demonstration scale of advanced biorefineries to mature technologies

EU support for demonstration?

International benchmark on the share of basic, applied and development activities

Source: Key Science and Engineering Indicators, National Scientific Board, 2010 Digest, NSF, http://cordis.europa.eur/erawatch, OECD "Research & Development Statistics"

Competing in the global race

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US
- About $50 billion invested over the last decade on biofuels and biochemicals.
- In 2012, President Obama committed to further invest and support the development of the bioeconomy as *"a major engine for American innovation and economic growth"*
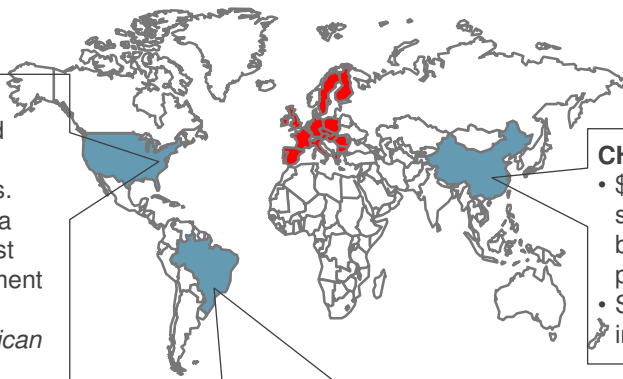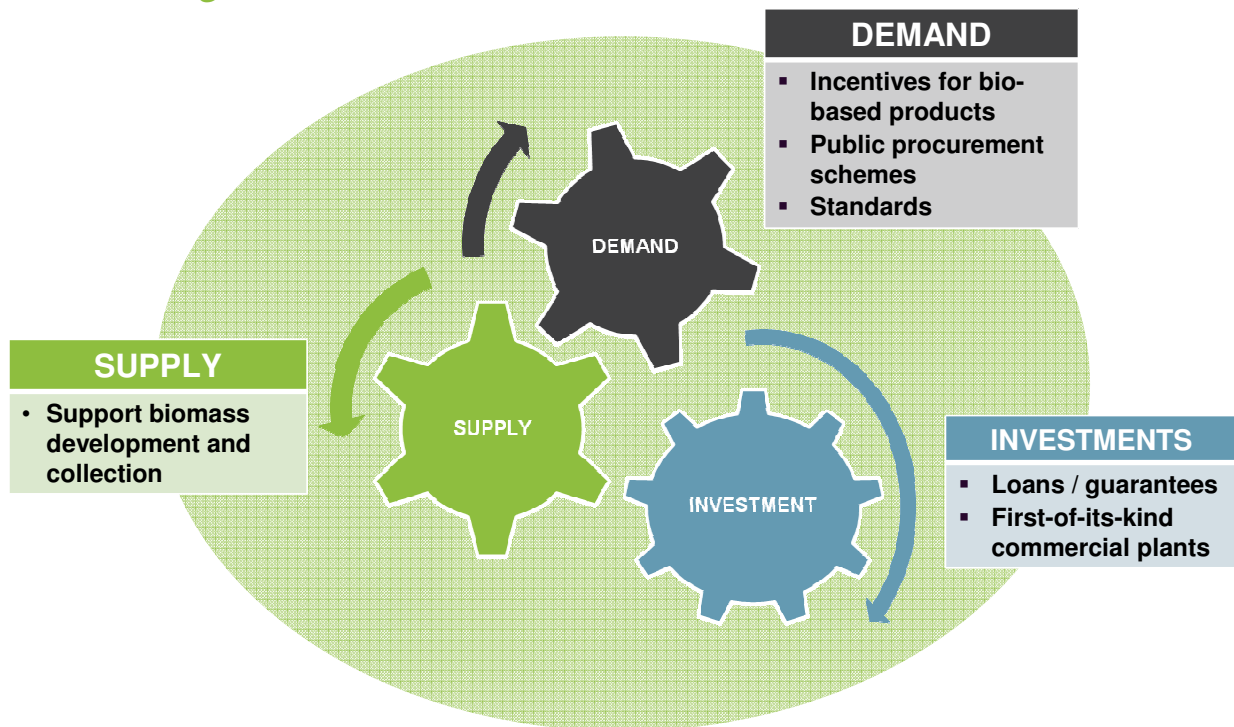
CHINA
- $308,5 billion investment on science & technology with biotechnology as a major priority over 2011-2015
- Substitute 20% of crude oil imports by 2020

BRAZIL
- Aims to be N°1 Global Bioeconomy
- R$ 3,3 billion support for 2nd generation bioethanol, biochemicals and biomass gasification technologies

Role of policy
ensuring a coherent framework

DEMAND
- Incentives for bio-based products
- Public procurement schemes
- Standards

SUPPLY
- Support biomass development and collection

INVESTMENTS
- Loans / guarantees
- First-of-its-kind commercial plants

Investing in new and sustainable
ways to organise our economy

About BRIDGE
Biobased and Renewables Industries for Development and Growth in Europe

- A Public-Private Partnership (PPP) between the Biobased Industries and the EU

- A joint commitment of €3.8 billion over 2014-2020
  o €1 billion (EU)
  o €2.8 billion (Biobased Industries)

- Multi-annual funding programmes for biobased projects

- Enabling rural development and re-industrialisation in Europe

Vision

An economy that:

- sources domestic renewable raw materials

- produces food, feed, chemicals, materials and fuels locally

- creates jobs in a broad range of sectors in Europe, triggering rural growth across regions

- places sustainability, smart and efficient use of resources at the heart of industrial, business and social activities

Focus

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Feedstock	• Fostering a sustainable biomass supply and building new value chains
Biorefineries	• Optimising efficient processing through R&D and upscaling in large-scale demo/flagship biorefineries
Markets, products and policies	• Developing markets for biobased products and optimising policy frameworks

BRIDGE benefits for Europe

Create value by using resources more efficiently by maximising the potential of **waste**, agriculture and forestry **residues**

Diversify and grow **farmers' incomes**: up to 40% additional margins with existing residues

Bring existing value chains to new levels and build new value chains, thus **revitalising industry in rural environment**

Realise a new generation of biobased materials and composites produced in **biorefineries**

Create a competitive biobased infrastructure in Europe, boosting **job creation**, 80% of which will be in rural and underdeveloped areas

Replace at least **30% of oil-based chemicals** and materials with biobased and biodegradable ones (2030 target)

Meet **25%** of Europe's transport energy needs with **advanced biofuels** (2030 target)

NEXT STEPS

Next steps - indicative timeline

10 July 2013	**European Commission officially proposes package of JTIs, including "BRIDGE" - the Biobased PPP** **•CEOs with Commission President Barroso and Commissioner Geoghegan-Quinn**
July-Oct 2013	EP opinion / Council decision
January 2014	Start of BRIDGE, the Biobased PPP
Q1-Q2 2014	Publication of first calls for proposals
Mid-2014	Joint Undertaking (JU) operational (office & staff) (until then, the JU will be operated by the Commission)

FOUNDING PARTNERS

www.bridge2020.eu