



# A Bioeconomy for Europe

Using resources from land and sea  
for a post-petroleum economy

**Tom Dodd**

**Tallinn, 26 March 2014**

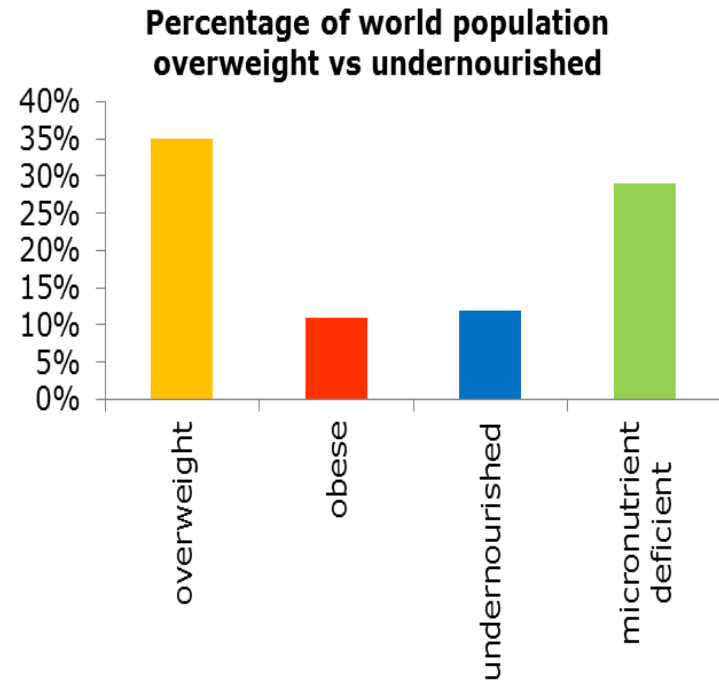
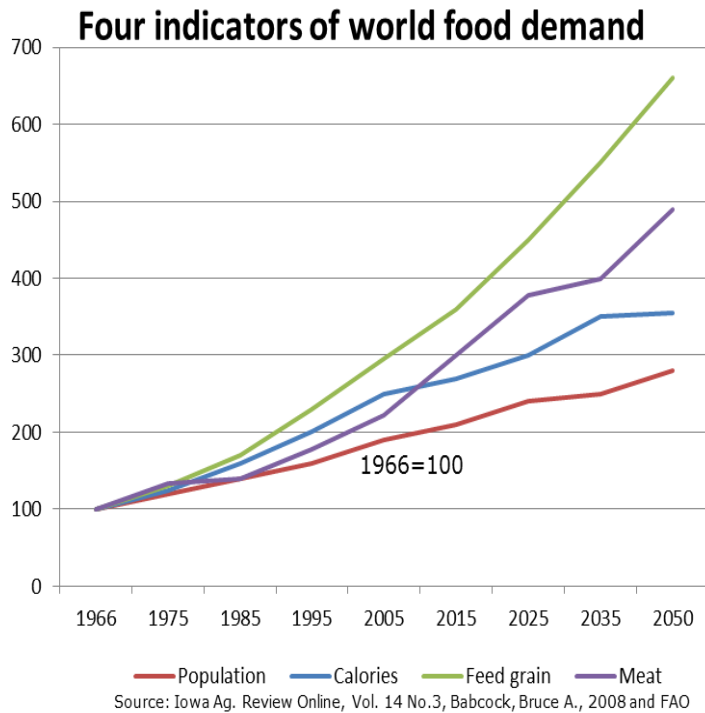
## The bioeconomy: what are we talking about?

"The production of renewable biological resources and the conversion of these resources and waste streams into value added products, such as food, feed, bio-based products and bioenergy"

### Sectors:

- agriculture, forestry, fisheries, food, pulp & paper
- parts of chemical, biotechnological and energy industries

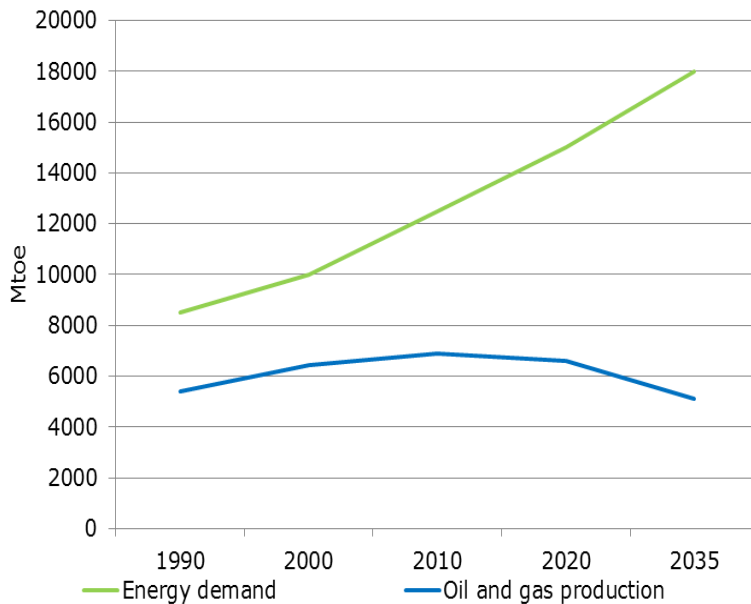
# Ensuring food security



Source: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

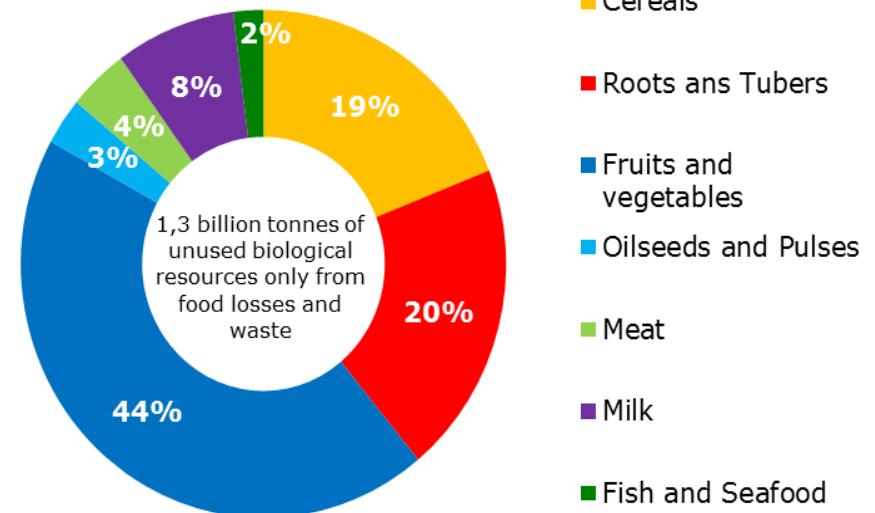
# Moving from a fossil-based economy to a bioeconomy

Energy demand and supply



Source: Campbell's Atlas of Oil and Gas Depletion, 2nd ed., C.J. Campbell (ed), 2013 and World Energy Outlook, International Energy Agency (IEA), 2010

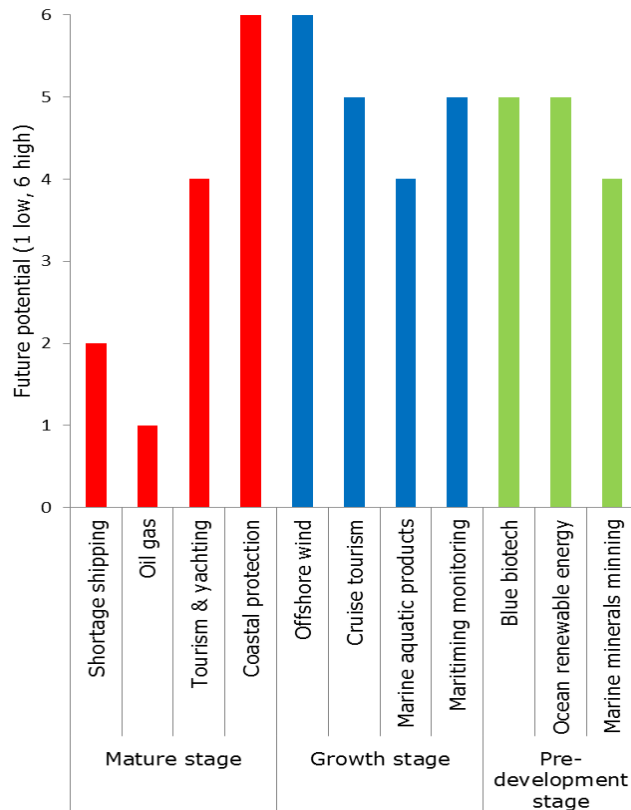
Global food loss and waste by commodity



Source: World Resource Institute, Working Paper based on FAO's report "Global food losses and food waste", May, 2013.

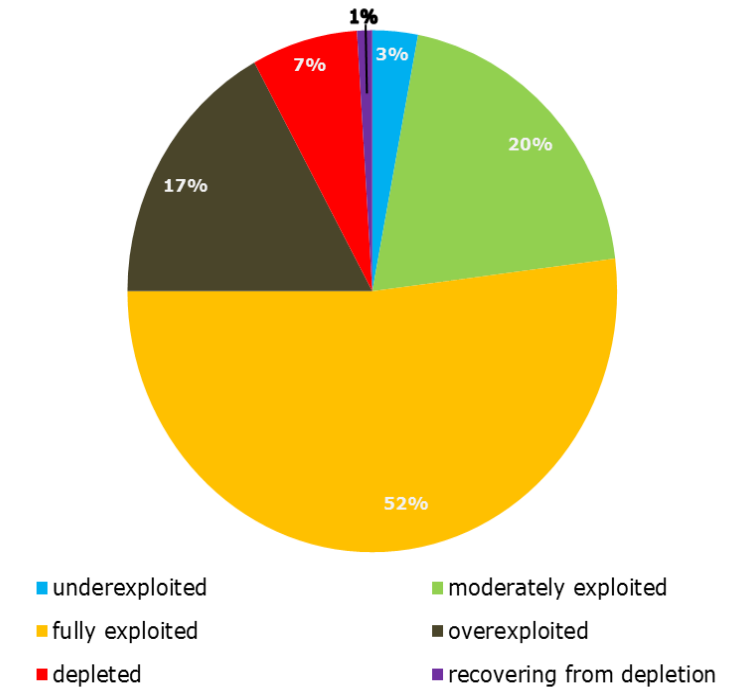
# Unlocking the potential of seas and oceans

**Potential of maritime economic activities**



Source: "Blue Growth: Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts. Third Interim Report", ECORYS, March 2012. Report commissioned by DG MARE.

**Overexploitation of fish species**



Source: "Review of the State of World Marine Fisheries Resources", FAO Fisheries and Aquaculture Department, Rome 2011.

# The Bioeconomy Strategy and Action Plan

## STRATEGY

### TACKLING SOCIETAL CHALLENGES

- Ensuring food security
- Managing natural resources sustainably
- Reducing dependence on non-renewable resources
- Mitigating and adapting to climate change
- Creating jobs and maintaining European competitiveness

### DEVELOPING A BIOECONOMY

- Coherent policy
- Investment in knowledge, innovation and skills
- Participative governance and informed dialogue with society
- New infrastructures and instruments

## ACTION PLAN

INVESTMENTS IN RESEARCH, INNOVATION AND SKILLS



REINFORCED POLICY INTERACTION AND STAKEHOLDER ENGAGEMENT



ENHANCEMENT OF MARKETS AND COMPETITIVENESS IN BIOECONOMY SECTORS

## **Pillar 1: investments in research, innovation and skills**

- Research funding and coordination: EU, national, regional, private.
- Horizon 2020
- Skills and educational curricula

## **Pillar 2: reinforced policy interaction and stakeholder engagement**

- European Bioeconomy Panel
- Bioeconomy Observatory
- Support development of national/regional bioeconomy strategies
- International cooperation



## **Pillar 3: enhancement of markets and competitiveness in bioeconomy**

- Knowledge base, including PPP for Bio-based industries
- Market instruments for uptake of bio-based products
- Consumer information
- Green public procurement

# Horizon 2020, call for **I**nnovative, **S**ustainable and **I**nclusive **B**ioeconomy

**ISIB 8 - 2014: Towards an innovative and responsible bioeconomy** (CSA, € 1-2 million)

A. Engaging society, reaching end users and linking with policy makers for a participative governance of the bioeconomy

B. Bridging research and innovation efforts for a sustainable bioeconomy

# The bioeconomy starts here



## And finally . . .

- Bioeconomy Stakeholder Conference, Turin, 8-9 October 2014

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