# Seaweed as feedstock for the biobased economy

Building sustainable value chain in North Sea region



Piotr Pukala, ECN Assen 16 June 2015



### Can seaweed help to address major stress factors?

- R. E. Smalley, 2003
  - Nobel price winner
  - Rice University



Humanity's Top Ten Problems for next 50 years
1. ENERGY
2. WATER
3. FOOD
4. ENVIRONMENT
5. POVERTY
6. TERRORISM & WAR

- 7. DISEASE 8. EDUCATION
- 9. DEMOCRACY
- 10. POPULATION

2003 6.5 Billion People 2050 8-10 Billion People

www.wikipedia.com



#### Due to its interesting unique constitution





## Seaweed based products provide access to many innovative markets



#### Let's build a sustainable value chain

#### Bringing selected partners together



Hatchery Genetics Multiplication Seedings Cultivation Varieties Crop optimisation

Harvest Mechanisation Automation Storage Quality Pre-processing

Processing Thermal/chemical Extraction Conversion Filtration Bio-refinary Sales&Marketing Distribution BtC, BtB market development Regulatory





# It's time to embrace seaweed as a business opportunity,...

We witness growing amount of demonstration EU projects!

- Let's capitalize on unique North
   Sea EU position in relevant sectors
- Mobilize resources to access this emerging business opportunity
  - Secure funding
  - Boost IP development
- Create leading bio-based hub, strenghthening local economy and securing future jobs!





### Feel free to join this initiative! **Piotr Pukala ECN** pukala@ecn.nl +31610306268Thank you for your attention!

