

BioKokkola 2017 –afternoon session Oct., 31

Forests as a driver for innovative solutions in the bioeconomy

Chemical modification of wood industry waste biomass to new materials/chemicals

Tannin foams as new biobased products from saw mills

Biorefinery development close to commercialization – Swedish examples

Nanocellulose – properties and possibilities

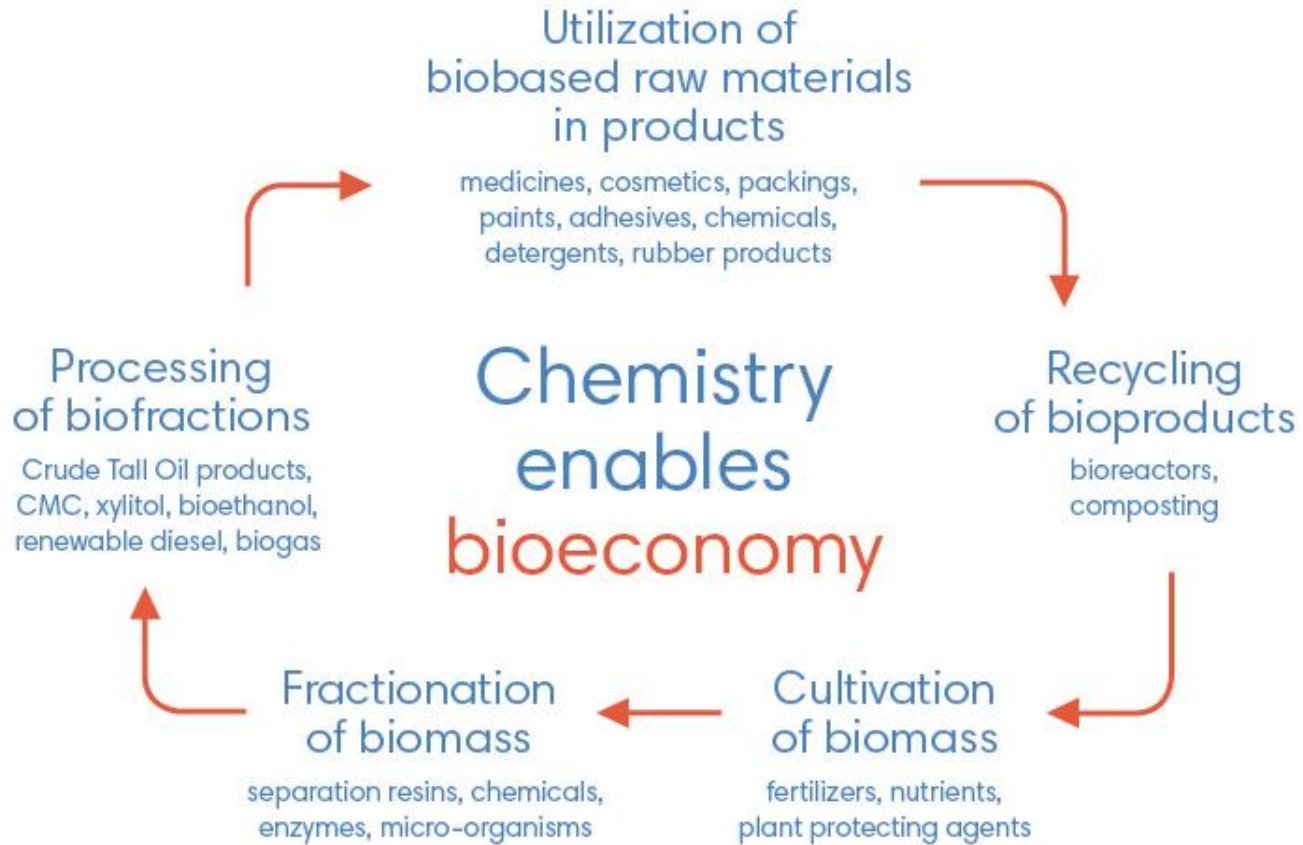
High value chemicals from spruce (*Picea abies*) extractives

Increasing the value of a tree biomass by **mechanical fractionation**

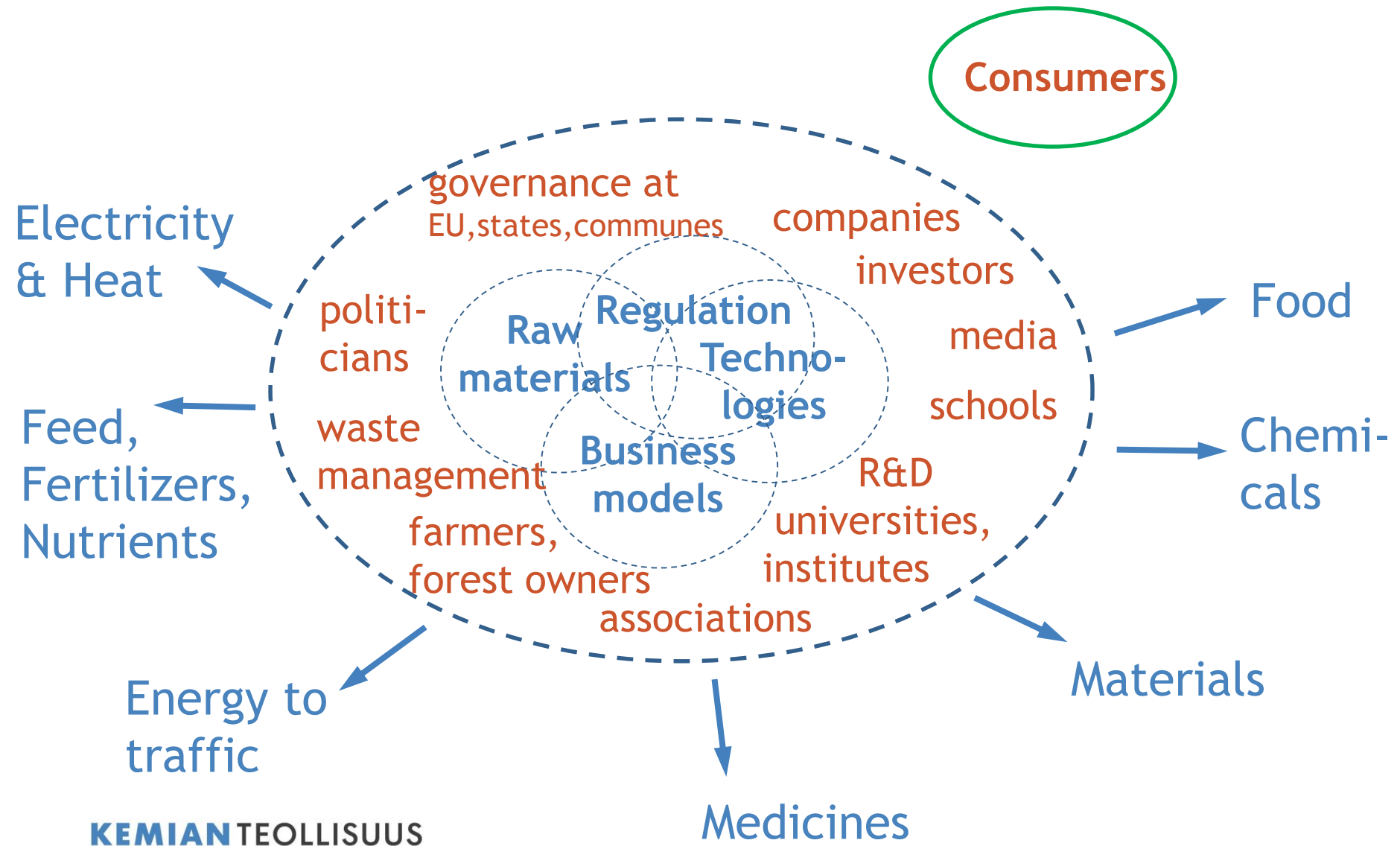
Finland **Business concept** and cluster for biorefinery in Kokkola

STEM Education in Future Competence Needs of the Chemical Industry

Bioeconomy



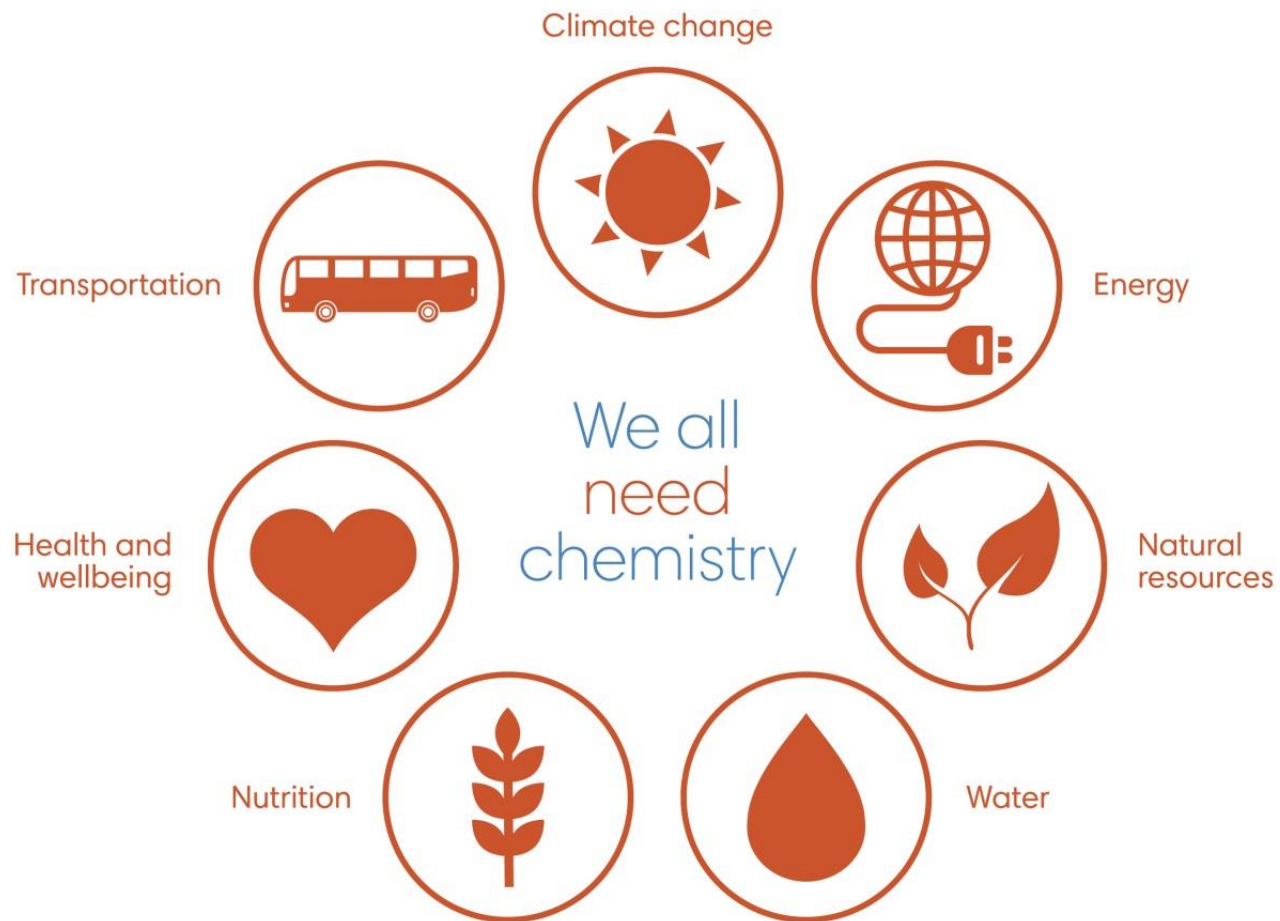
Co-operation in the core of BioCircular Economy



Sustainability includes many aspects in the chemical companies

- i) Material & energy efficiency
- ii) Minimization of emissions
- iii) Safety, **wellbeing** at work
- iv) Increase of the share of **renewable and secondary** raw materials
- v) New business models and **networks**, including new ways to organize work
- vi) **Core** of the business rooted in boosting sustainable development

- **Green Economy**
- **Circular Economy**
- **Bio-economy**



Thank You!



@MaijaPohjakalli
@Kemianteollisuu

www.kemianteollisuus.fi/en/sustainability/chemistry-enables-the-circular-economy-and-bioeconomy/

maija.pohjakallio@kemianteollisuus.fi

KEMIANTEOLLISUUS