### Welcome

Workshop: Landscape management and design for food, bioenergy and the bioeconomy: methodology and governance aspects

15 - 16 March, Chalmers, Gothenburg, Sweden



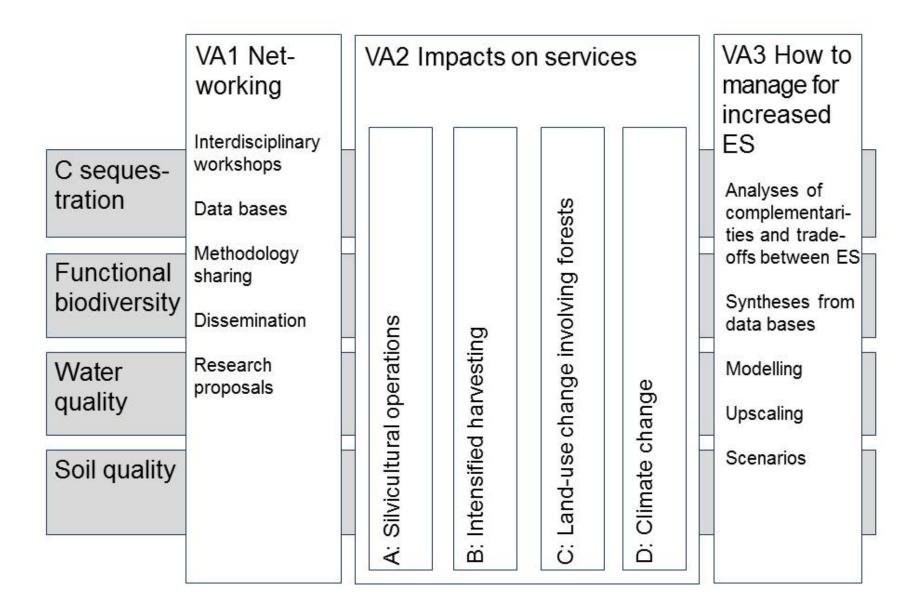
Nordic Forest Research (SNS)

#### Centre of Advanced Research on Environmental Services from Nordic Forest Ecosystems CAR-ES III (2016-2020)

- Open network funded under the Nordic Council of Ministers that brings together Nordic and Baltic forest researchers
- Aims to provide the best scientific knowledge for informed decisionmaking on forest management, concerning provisioning of environmental services
- Focus: carbon sequestration, water and soil quality, biodiversity
- Core partners:



### **CAR-ES** activities



### Expectations

- Getting new ideas and inspiration regarding:
  - Methodologies to quantify environmental ecosystem services
  - Methodologies for generalizing and up-scaling environmental impacts from stand to landscape level
- Connect with people who have complementary skills and approaches



Network "Effects of bioenergy production from forests and agriculture on ecosystem services in Nordic and Baltic landscapes"

Part-funded by SNS and NKJ





Sustainable bioenergy production from agriculture and forestry Aim: to learn from each others' experiences regarding the effect of more intensive management for biomass and bioenergy production from forests and agriculture on ecosystem services in Nordic and Baltic landscapes



1st workshop, Jeløy, Norway, 4-5 April

- Do the same challenges with respect to ecosystem services exist in all Nordic and Baltic countries and across sectors?
- How can forestry and agriculture be driven to optimize provisioning of ecosystem services at a landscape level?
- What trade-offs may be necessary, and will these be the same in all countries?
- What are the effects of differences in governance between countries?











- Global Bioenergy Partnership
  - G8+5 plan of action in 2005 -> launch at 14<sup>th</sup> CSD meeting in 2006
  - Partners/observers: 23/27 countries and 14/12 international organizations and institutions
  - Mechanism for partners to organize, coordinate and implement targeted international RD&D and commercial activities related to production, delivery, conversion and use of biomass for energy
  - Forum to develop effective policy frameworks
  - Sustainable Development; Climate Change; Food and Energy Security
- WG on capacity building for sustainable development
  - Activity Group 6: Bioenergy and water
  - Started in 2015
  - Identify and disseminate ways of integrating bioenergy systems into agriculture and forestry landscapes to improve management of water resources

- The Royal Swedish Academy of Agriculture and Forestry
  - Founded in 1813
  - "...with the support of science and practical experience, promote agriculture and forestry and related activities, for the benefit of society"
  - Meetings, conferences, seminars and symposia offers a forum for highlighting complex issues on which a complete picture is missing and where different solutions must be weighed against each other

#### Committee for Energy Issues

- Contribute to better knowledge about the possible contributions of forestry and agriculture to reduced fossil fuel dependency and carbon sequestration
- Policy and economic issues, sustainability criteria, biofuels and biobased products
- Produce fact sheets and reports
- Host meetings and disseminate meeting outcomes

- Energy in a Circular Economy, 2015-2019
  - Profile area within Chalmers Energy Area of Advance
- Five areas of work:
  - Resources
  - Industrial combustion and gasification processes
  - Biochemical processes
  - Carbon capture processes
  - Chemical processes and Process integration
- Work area Resources
  - Development of system analysis to extend and improve sustainability assessments of biomass production chains
  - Assessment of biomass supply prospects under varying biophysical, social and economic conditions
  - Methods and frameworks supporting governance and stakeholder dialogues on choices between objectives that may not be fully compatible

#### • Task 43 – Biomass feedstocks for energy markets

- 12 countries, including the European Commission (EC-JRC)
- Bioenergy feedstock production systems in agriculture and forestry, global scope
- issues critical to mobilization, including feedstock production, logistics, markets and impacts on ecosystem services
- Three interlinked work packages:
  - Landscape management and design for bioenergy and the bio-economy
  - Developing effective supply chains for sustainable bioenergy deployment
  - Governing sustainability of land use and bioenergy supply chains
- Example aspects that are addressed
  - Localisation, design and management of biomass production systems to promote resource use efficiency and positive environmental, economic and social impacts
  - Assessment and analysis of bioenergy supply chains to inform governance and stakeholder processes
  - Assessment and analysis of public and private regulation in the context of multiple stakeholders objectives, to inform decision making

### House rules and practical info

- Thematic groups for group discussions, select at lunch if not done already
- Rapporteurs: Summarize key points from group discussions and write them under your group theme/ specific questions in the word document with the questions. Ok to add other related issues.

**Report back** a few key questions / issues discussed during final sessions **Send notes to:** <u>eskil.mattsson@chalmers.se</u> before the end of workshop For those who have signed up for the dinner, around 20 seats

- Moderators will remind speakers when 5 and 1 min left (green / red cards) Important to stick to the time for lunches and refreshments
- Wifi: Code on paper notes day 1, sign up with email day 2,
- Twitter: #LandscapeWS
- Informal dinner tonight 19.00 at: "Levantine" Aschebergsgatan 22