

SUNRISE – Solar energy for a circular economy

SUNRISE Finland Stakeholder Workshop 9th December 2019

Venue: Biocity (Tykistökatu 6, Turku, Finland), Presidentti meeting room

Organized by the SUNRISE CSA (www.sunriseaction.eu), the Nordic Centre of Excellence "NordAqua" (www.nordaqua.fi) and SmartBio Biocity Turku Research Programme (www.smartbio.fi)

Updated Programme

08.30 Registration and coffee

09.00 Opening remarks - Eva-Mari Aro / Yagut Allahverdiyeva-Rinne, University of Turku, Finland

Session 1. SUNRISE solar fuels and chemicals S&T roadmap for a circular economy

Chair: Eva-Mari Aro

09.15 Frederic Chandezon, co-chair of SUN-ERGY, leader of the SUNRISE governance WP, CEA Grenoble, France - *Overview of the SUNRISE action and of the SUN-ERGY initiative*

10.00 Jukka Kola, Rector of the University of Turku - Welcome words

10.15 Reko Leino, Academy of Finland - Funding opportunities and upcoming research programs

10.30 Arne Roth, Fraunhofer, Germany - Approach 1 - Electrochemical conversion with renewable power

10.50 Joanna Kargul, University of Warsaw, Poland - Approach 2 - Direct conversion via integrated artificial photosynthetic systems

11.10 Yagut Allahverdiyeva-Rinne, University of Turku, Finland - *Approach 3 - Direct conversion via biological and biohybrid systems*

11.30 Lunch

Session 2: SUNRISE supporters (academy and industry)

Chair: Yagut Allahverdiyeva

12.30 Merja Penttilä, VTT, Finland - The SynBio PowerHouse

12.45 Mika Valden, Tampere University, PREIN Academy Flagship, Finland - *Surface Science Approach to Solar Fuel Production via Artificial Photosynthesis*

13.05 Jero Ahola, Lappeenranta-Lahti University of Technology, Finland - Power-to-X in energy transition

13.25 Johan Bobacka, Åbo Akademi University, Finland - Research at the ÅA - Electrochemistry and electroactive materials

13.45 Paulina Uronen, Neste, Finland – *Algae-based aviation fuel provides a sustainable choice for airlines*

14.00 Tekla Tammelin, VTT, Finland - FinnCERES Academy Flagship- Competence Centre for the Materials Bioeconomy

14.15 Coffee break

14.30 Maija Pohjakallio, Sulapac Oy, Finland - *Solar-based polymers - possible applications in Sulapac materials*

14.45 Linda Fröberg-Niemi, Turku Science Park Oy, Finland - *Turku Business region: Academy - Industry relationship*

14.55 Juha-Pekka Pitkänen, CTO & Co founder of SolarFoods Oy, Finland - *Carbon neutral production of natural protein sources*

15.10 Bärbel Friedrich, member of the SUNRISE Advisory Board, Germany - *The global CO₂ challenge: A view from the German National Academy Leopoldina*

15.25 Tom Granström, St1, Finland - St1 pathway to the future of renewable energy

A panel discussion: Current status and challenges in transition from fossils to renewables

15.40 Juho Korteniemi (Ministry of Economic Affairs and Employment of Finland), Kyösti Lempa (NordForsk), Bärbel Friedrich (Leopoldina Germany), Frederic Chandezon (SUN-ERGY), Eva-Mari Aro (UTU), Joanna Kargul (SUN-ERGY) (+ scientists)

16.30 Closing remarks





