

SRIA 2023

Each chapter within SRIA 2023 should describe what needs to be done to bring the bioenergy and renewable fuels sector forward.

Table of Contents

1. Introduction (1 page)
 - a. Value of our value chains for
 - i. climate → GHG emission reduction
 - ii. economy → affordability
 - iii. society → social sustainability
 - iv. energy security → availability
 - b. Description of TEE (Technical, Economic and Environmental Assessment) methodology and KPIs to be applied (e.g. inspired by IEA Bioenergy Task 42 and EIBI – s. ETIP-B Website)
 - c. What is the need?
 - i. why do we need bioenergy
 - ii. why do we need SRIA
2. Deployment (2 pages)
 - a. Status of development and deployment
 - b. R&I for deployment (what are frontrunners doing to make early deployment, e.g. de-risking of investments, setting up supply chains (contracts with suppliers), access to capital,...)
3. Biomass (global) availability and supply (2 pages)
 - a. Availability (Include Popi's work for Concawe)
 - b. Hierarchy of use
 - c. Strict sustainability criteria
4. Value chains (1-2 pages per value chain)
 - a. Overview of value chains and how were they chosen (1 page incl. graph)
 - b. PVC1 Transport fuels via gasification
 - i. Technological development
 - ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)
 - c. PVC2 Power and heat via gasification – outdated/not relevant any more?
 - d. PVC3 Transport fuels via pyrolytic and thermolytic conversion
 - i. Technological development
 - ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)
 - e. PVC4 Intermediate bioenergy carriers (not exclusively for power and heat, but also e.g. FPBO)
 - i. Technological development

- ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)
- f. PVC5 Alcohol fuels from sugars
 - i. Technological development
 - ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)
- g. PVC6 Hydrocarbon fuels from sugars
 - i. Technological development
 - ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)
- h. Emerging technologies (might be more than 1)
 - i. Technological development
 - ii. Weak points (e.g. find an outlet for further transformation of FPBO) and strong points of the value chains
 - iii. Recommendations (What does it need to develop and deploy these value chains)
 - iv. Future outlook (beyond 2030)

Content foreseen in Infoboxes (0.5 page each) and placed where suitable

- E-fuels (RFNBOs)
 - Include ammonia?
 - Sub-headings?
- Sustainable Aviation Fuels
 - Specific EU regulation for this sector
 - Sub-headings?
- Marine Fuels
 - Specific EU regulation for this sector
 - Sub-headings?
- Biomethane
 - Sub-headings?

Maybe make a timeline graph for each sub-chapter on “Future Outlook (beyond 2030)”