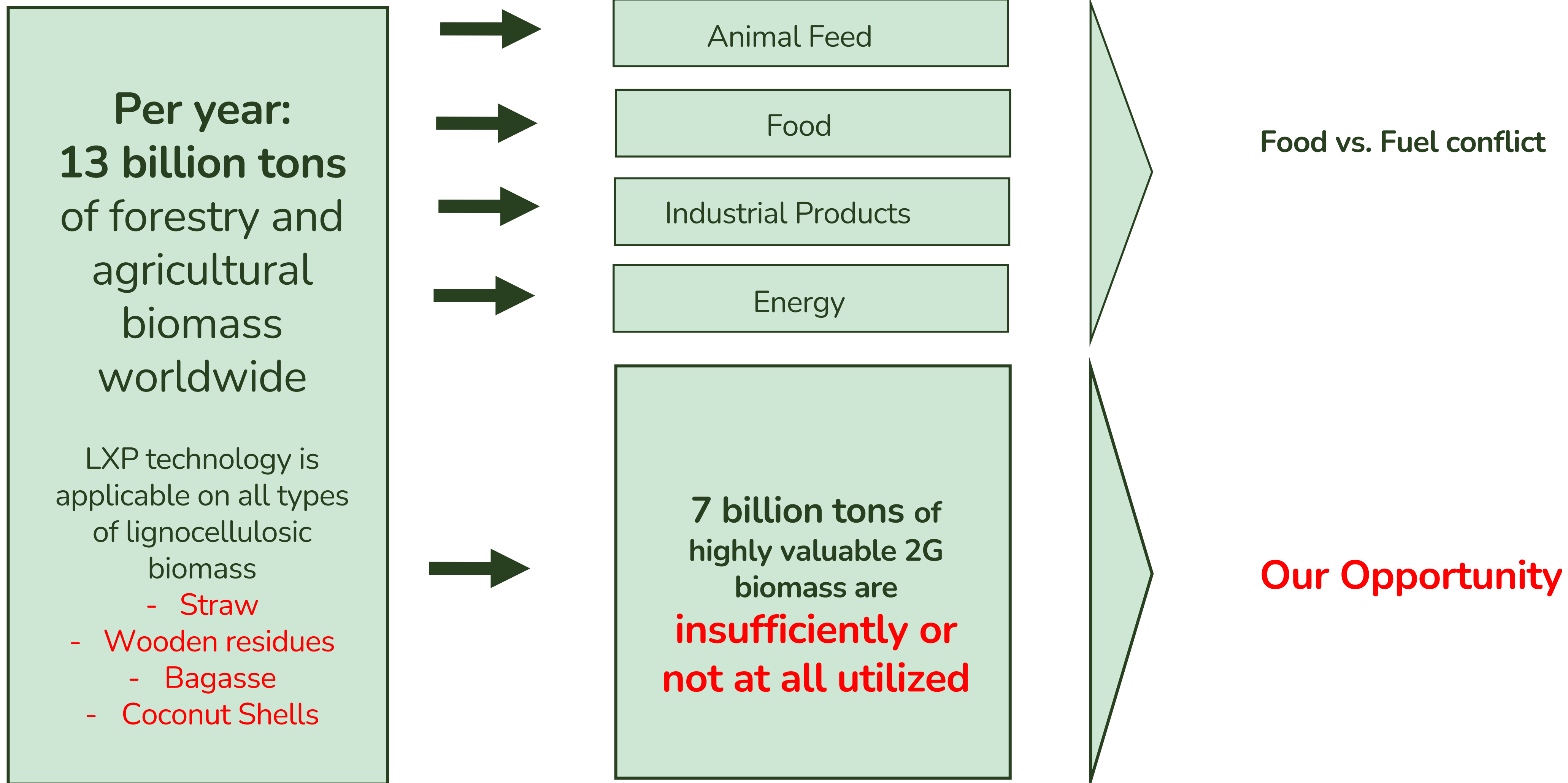
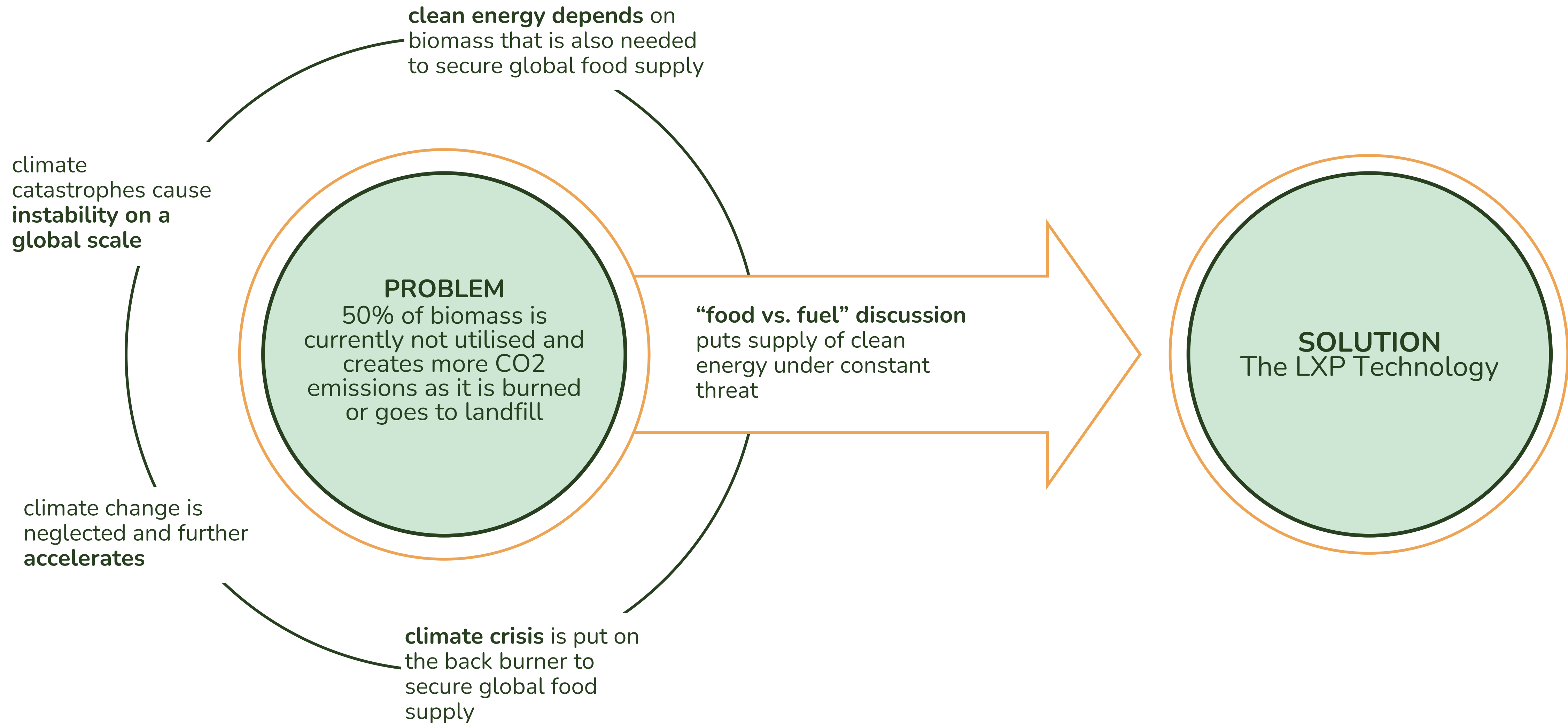


The profitable Future
of
2G Bioconversion





LXP Group was founded in 2012 with the intention to develop a technology that makes a broad range of biomasses available for 2G bioconversion:

THE LXP TECHNOLOGY

- > unlocks the potential of 2G biomass that is currently considered waste
- > enables the production of LXP Cellulose and LXP Lignin which can be processed into biofuels, and biochemicals
- > which can serve as sustainable drop-in replacements for fossil fuels and petrochemicals



Demonstration Plant
in Aholting (500 tpa)

OUR MISSION

We are creating a sustainable future for our planet through science and engineering by enabling the transition to a circular economy and affordable, clean, secure energy.

OUR VISION

By 2050, we will be the leading supplier and licensee of LXP Cellulose, LXP Lignin and LXP Technology to ensure equal access to sustainable energy and biochemical production on the planet.

2009

first application of the patent

2012

first operational LXP Mini-Plant

2019

first operational LXP Demo Plant

2023

first commercial LXP Plant

We will establish our scientific breakthrough on a global scale.



2G Biomass

e.g. **agricultural and forestry residues, greencut / garden waste**



LXP Plant + Technology

35 Patents



LXP Cellulose ©

Processed **into biomethane, sugar, biomethanol, bioethanol, lactic acid** and biochemicals down the value stream, so replaces fossil based fuels and chemicals.



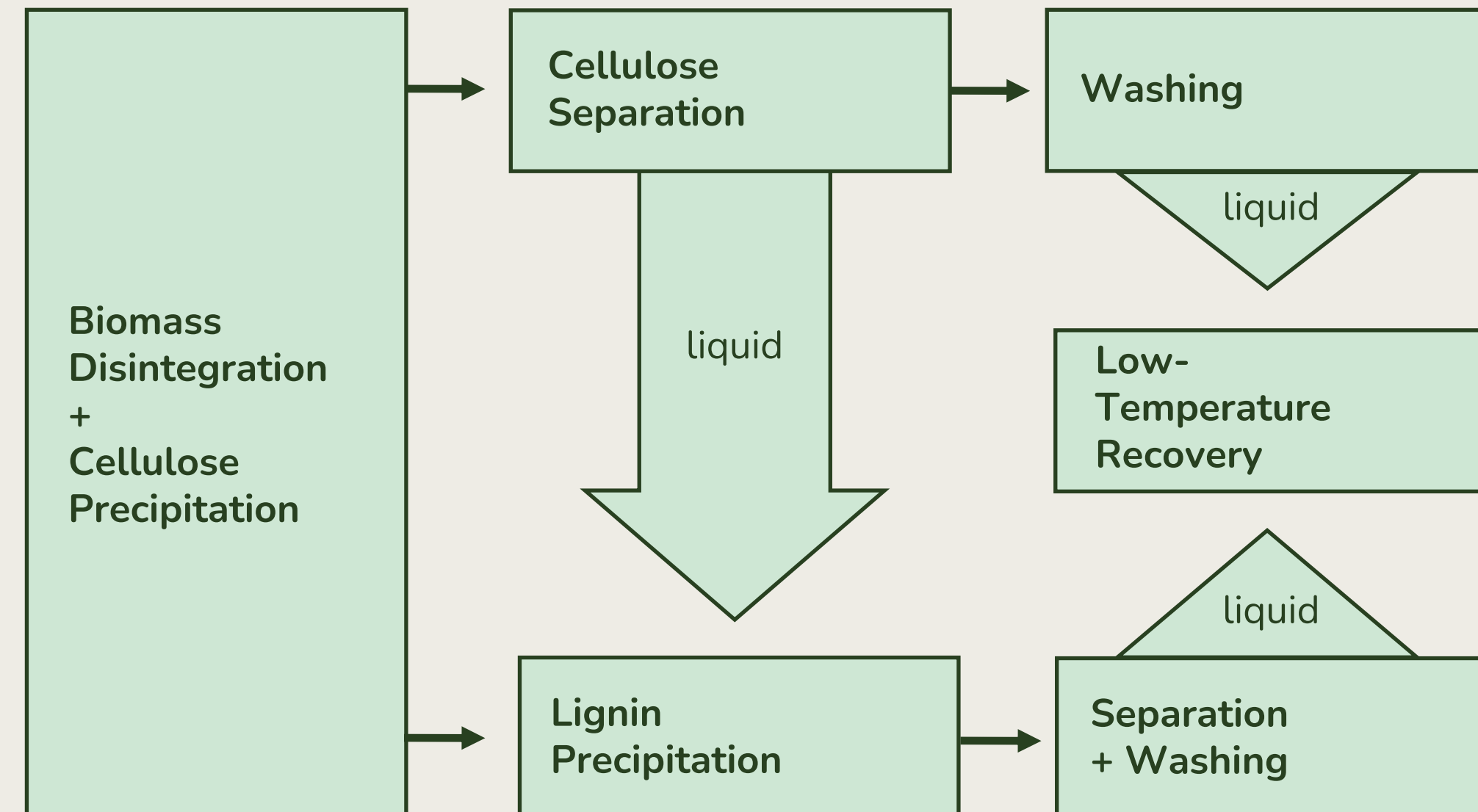
LXP Lignin ©

2.000 – 3.000 €/t, specific properties: Sulfur free and with a purity of > 90%, it replaces fossile Phenol in raisins, adhesives, cosmetics and carbon fibres

2G Biomass
 7 billion tons available per year

- Manure
- Bagasse
Empty Fruit Bunches
Banana Leaves
- Agricultural Residues
- Municipal Solid Waste
- Forestry Residues

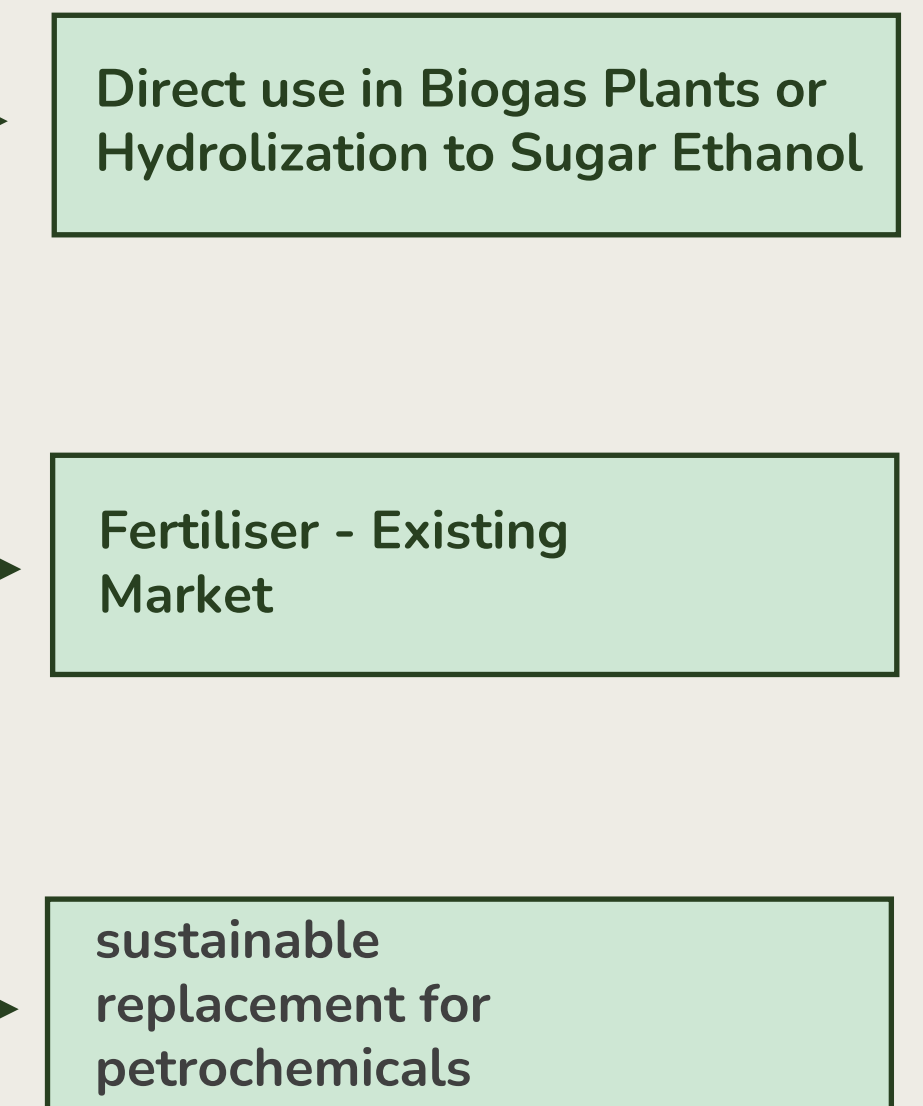
LXP Technology
 LXP-Plant connected to biofuel plants / bio-refineries



LXP Products
 LXP Lignin
 LXP Cellulose



Revenue Streams & Markets
 Disruption of the petrochemical market



Pre-treatment with **the LXP Technology enables an increase of biogas yield from biomass waste** between 30% and 100%, depending on the feedstock type, and makes **biomass waste viable for second-generation (2G) bioconversion.**

- > patent protected
- > tested at LXP Lab & Demo Plant
- > independently verified by Fresenius Institute



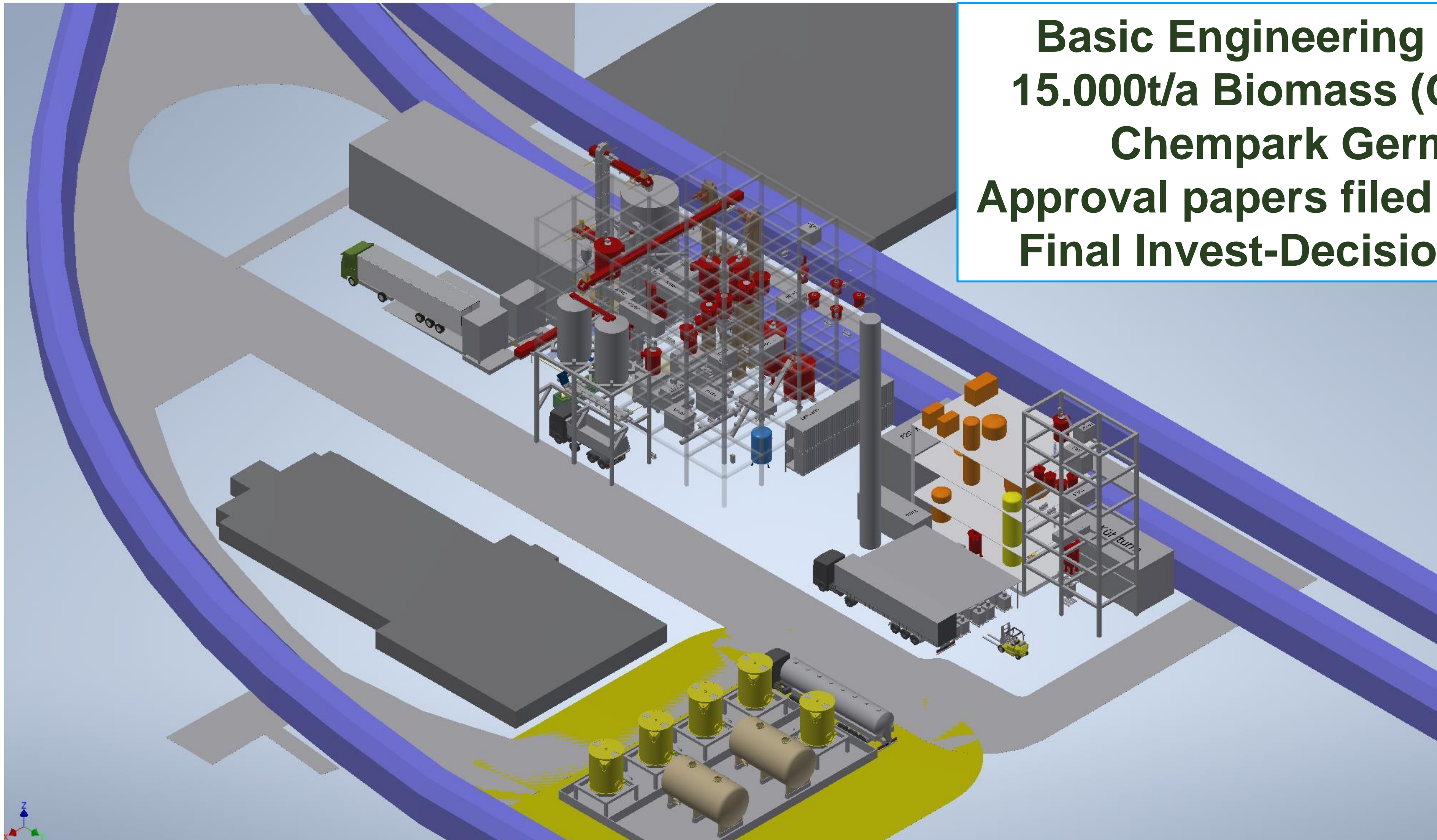
OPPORTUNITY

- + extends the economic lifetime of existing biogas plants
- + has the potential to turn the production of 2G biofuel into a zero-emission business

CHALLENGE

- + collection of the raw material can be difficult
- + market is inflexible and needs to be convinced

Demonstration Plant 50 kt Biomass/year



**Basic Engineering finished
15.000t/a Biomass (Organics)
Chempark Germany
Approval papers filed 4th Sep 23
Final Invest-Decision Oct. 23**

PRIMARY REVENUE STREAM

LXP Plant **Engineering + Licensing** of LXP Technology



2G Biomass
e.g. agricultural and forestry residues
i.e. cheap



LXP Plant + Technology
CAPEX + OPEX

SECONDARY REVENUE STREAM A

Royalties on production + usage of LXP Cellulose

LXP Cellulose ©

Processed into biomethane, sugar, bioethanol and (2G) biochemicals for the production of advanced, 2G (low-carbon) biofuels for transport and industry it can replace fossil fuels.

Target Costumer

Biogas & Bio(m)ethanol Plants

SECONDARY REVENUE STREAM B

Buyback + selling of LXP Lignin

LXP Lignin ©

Sulfur free and with a purity degree of over 90%, it can be used to replace chemicals in cosmetics, carbon fibre, adhesives, flavourings or 3D printer ink.

Target Costumer

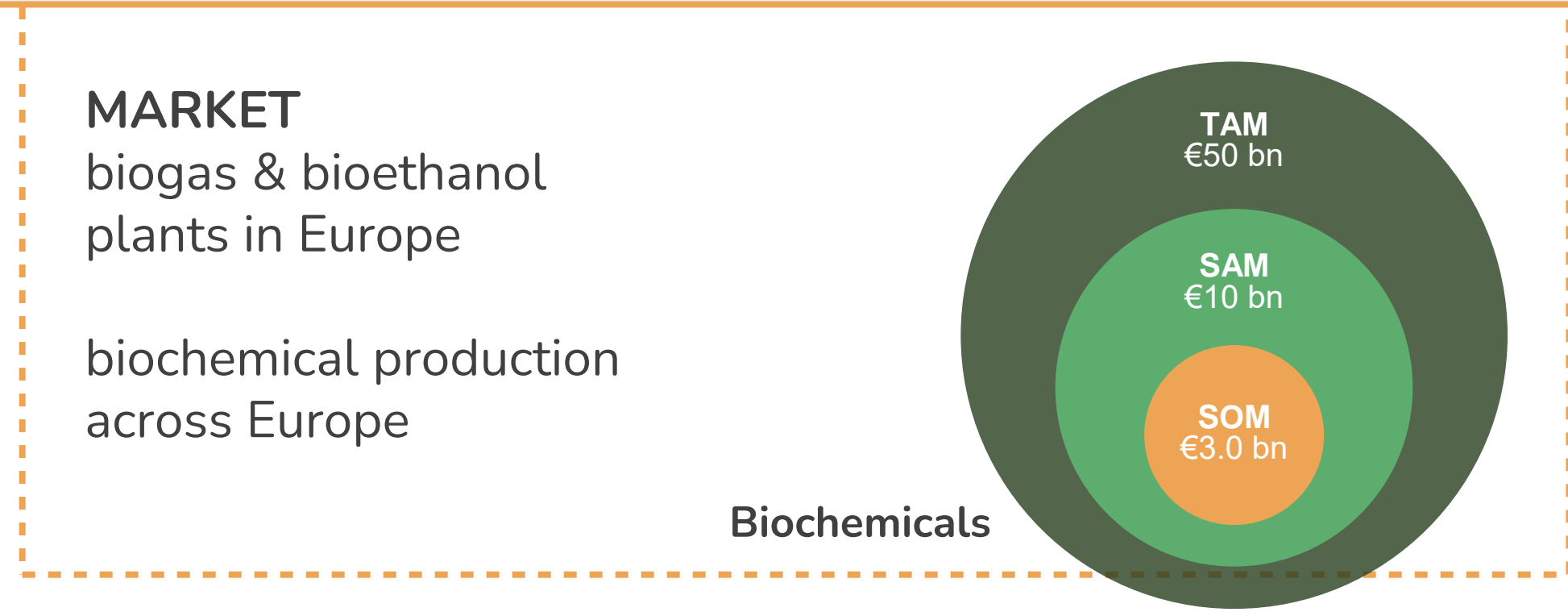
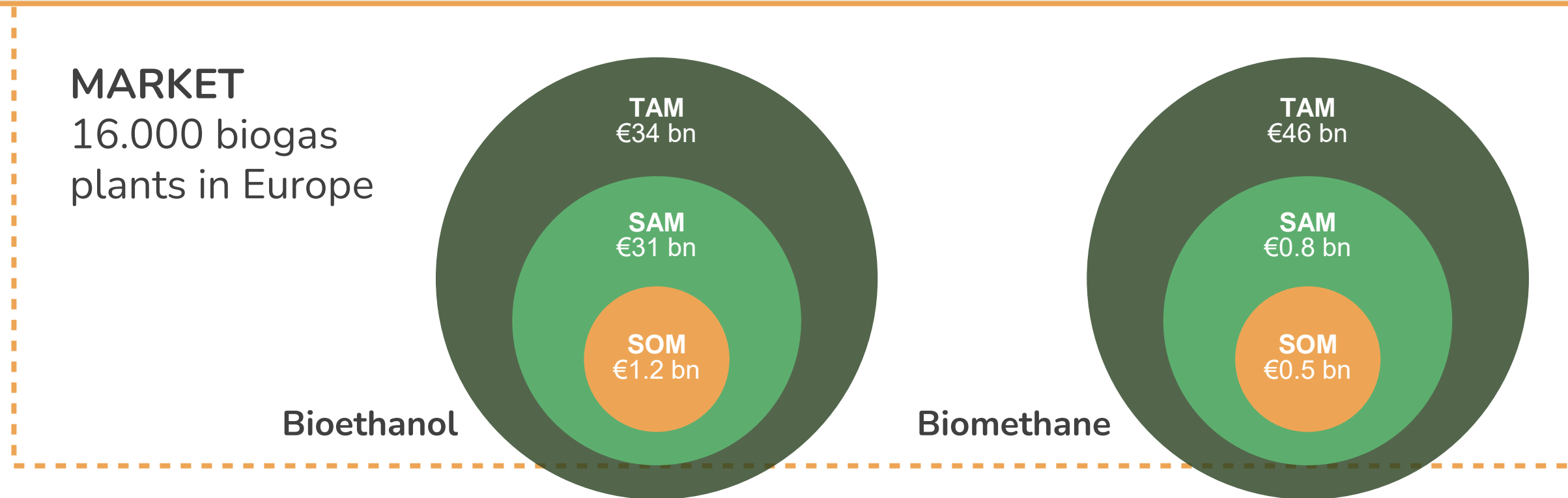
Chemical Companies

PRIMARY REVENUE STREAM

LXP Plant Planning + Licensing of LXP Technology

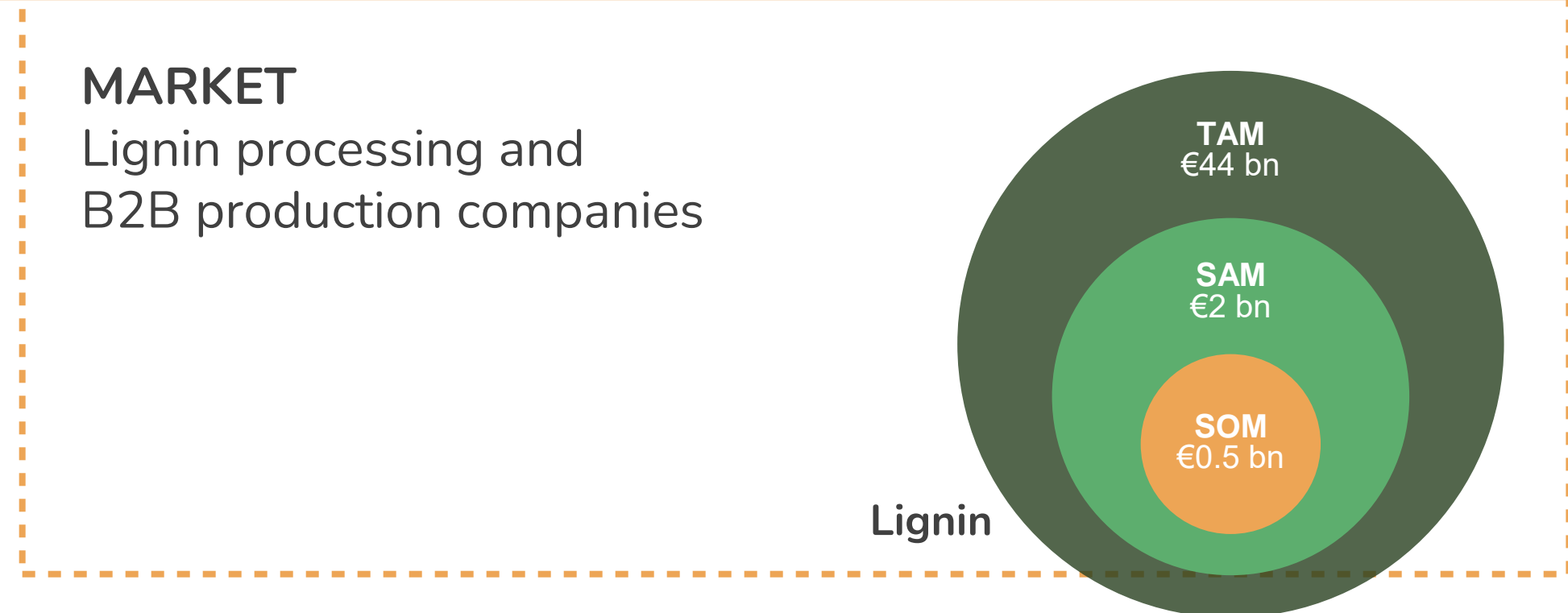
SECONDARY REVENUE STREAM 1

Royalties on production + usage of LXP Cellulose

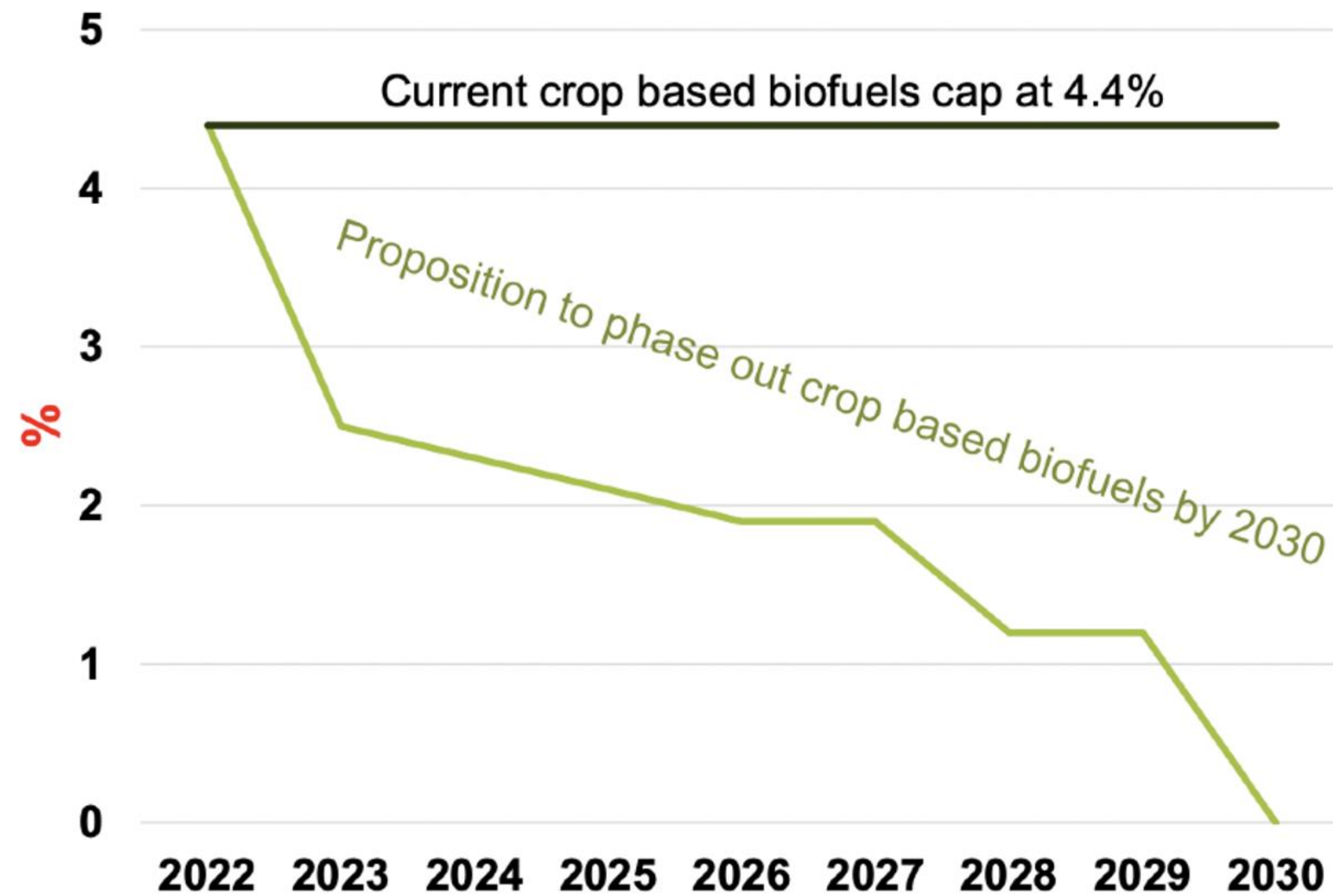


SECONDARY REVENUE STREAM 2

Buyback + selling of LXP Lignin as additional LXP product

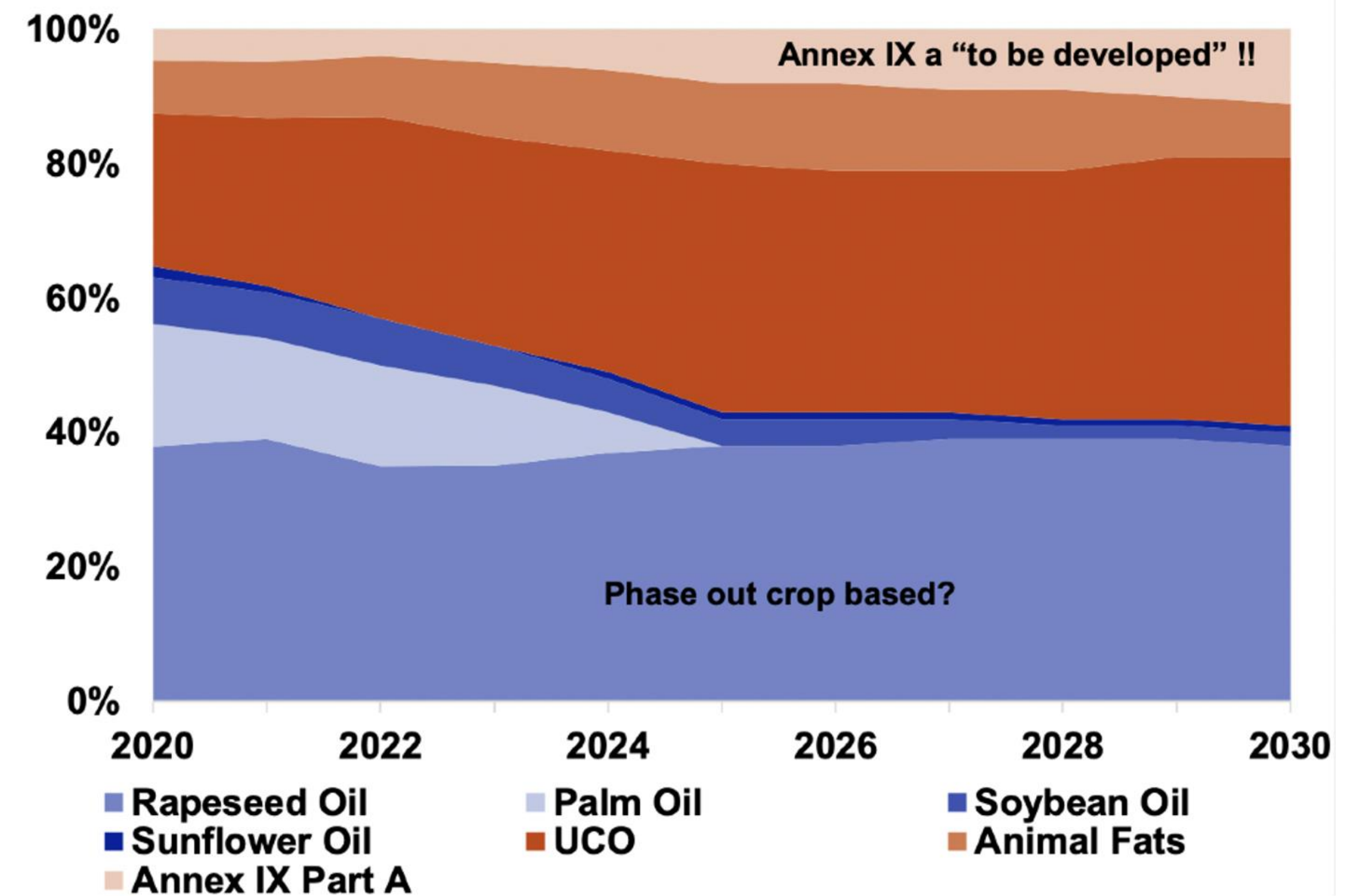


Germany proposal on crop biofuels



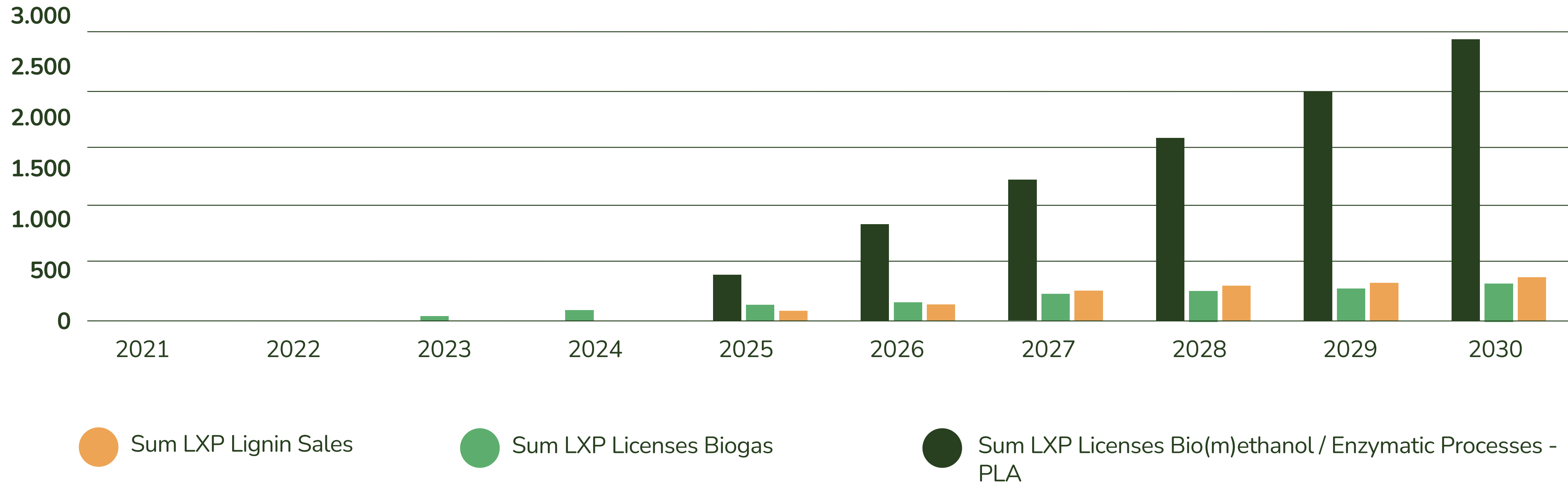
Source: German Ministry of Environment

EU-27 Biodiesel and Renewable Diesel Feedstocks



LXP Licenses sold

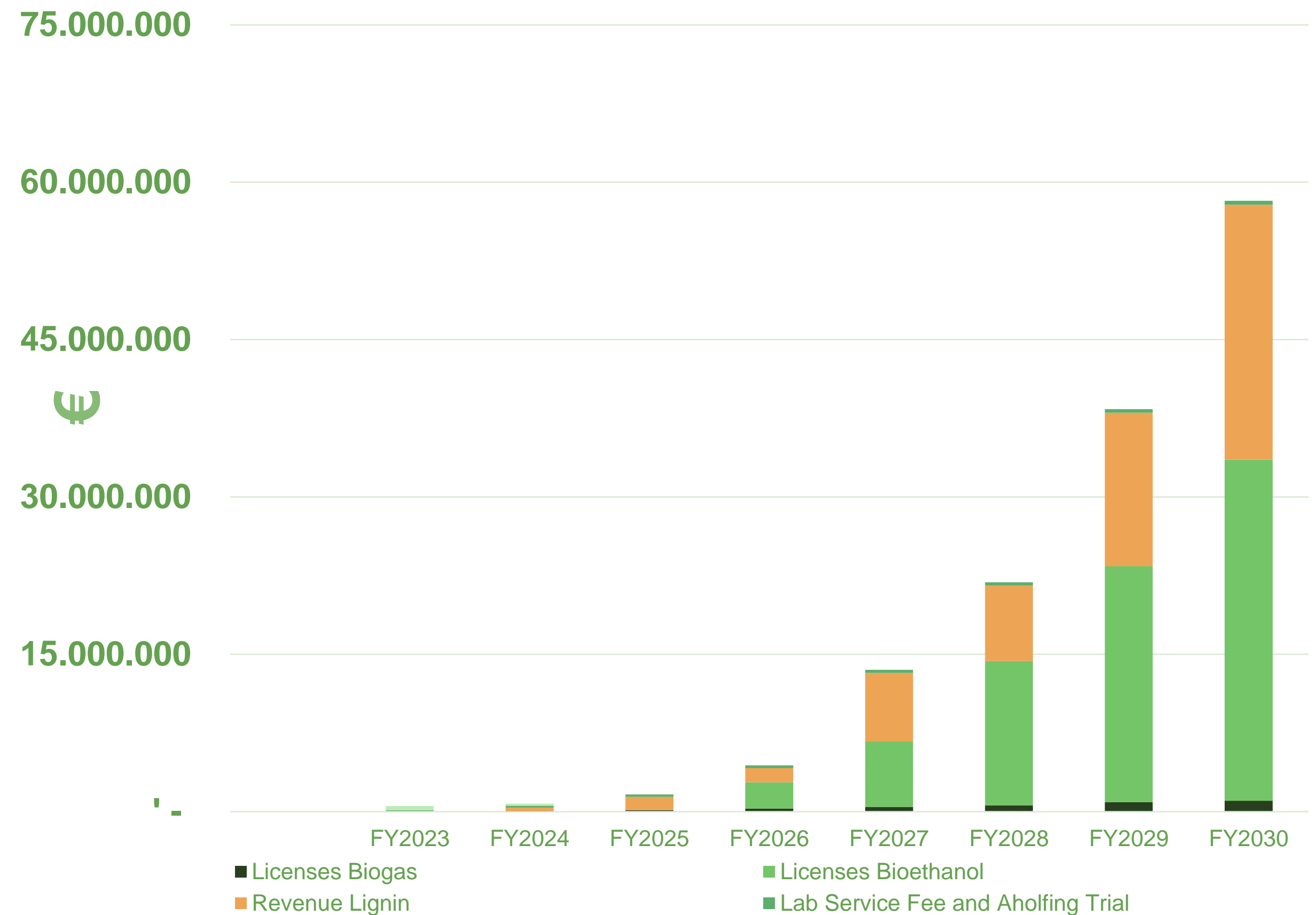
tons



LXP Focus and Revenue Forecast 2023 - 2030

1. **2022 – 2023**
Focus on license model and basic engineering
+ scale up 2M€
2. **2024 – 2025**
Demonstration plant operational 2025
Market development **Europe**
200kt/a development for Americas+APAC
3. **from 2025....**
Market development Americas and APAC
 - Cranberry-Residues (Canada)
 - Bagasse (Brasil)
 - empty fruit bunches (Malaysia)

Revenue LXP Group





Dr. Volker Bauer
CEO/COO

PhD in Chemical Engineering with **25 years of experience**, COO of 500M€ turnover company.



Mr. Thomas Fichter
CEO/CFO

MBA with 30 years of operational and administrative experience in the **chemical industry**.



Dr. Seema Saini
CTO

PhD in Chemical Engineering with 10 years of experience in **sustainable materials and application** development.



Mr. Christian Hadwiger
CPO

Master in Process Technology & Renewable Energy Systems. 6 years of experience in **Process optimization and scale-up**.

- 9 employees at the LXP Group Headquarters
- 3 employees at the Pilot Plant

Investment Profile

To date raised €15M from VC (MIG), Strategic Investor (Südzucker), Business Angels and subsidies

Operational Agenda

+ Final Investment decision 50kt/a plant with our industrial partner Oct 2023

Financial Agenda

- + First license sold 2022
- + First commercial facility operational by 2025
- + Breakeven for LXP Group by end of 2025



Dr. Volker Bauer
CEO

volker.bauer@lxp-group.com



Let's talk.