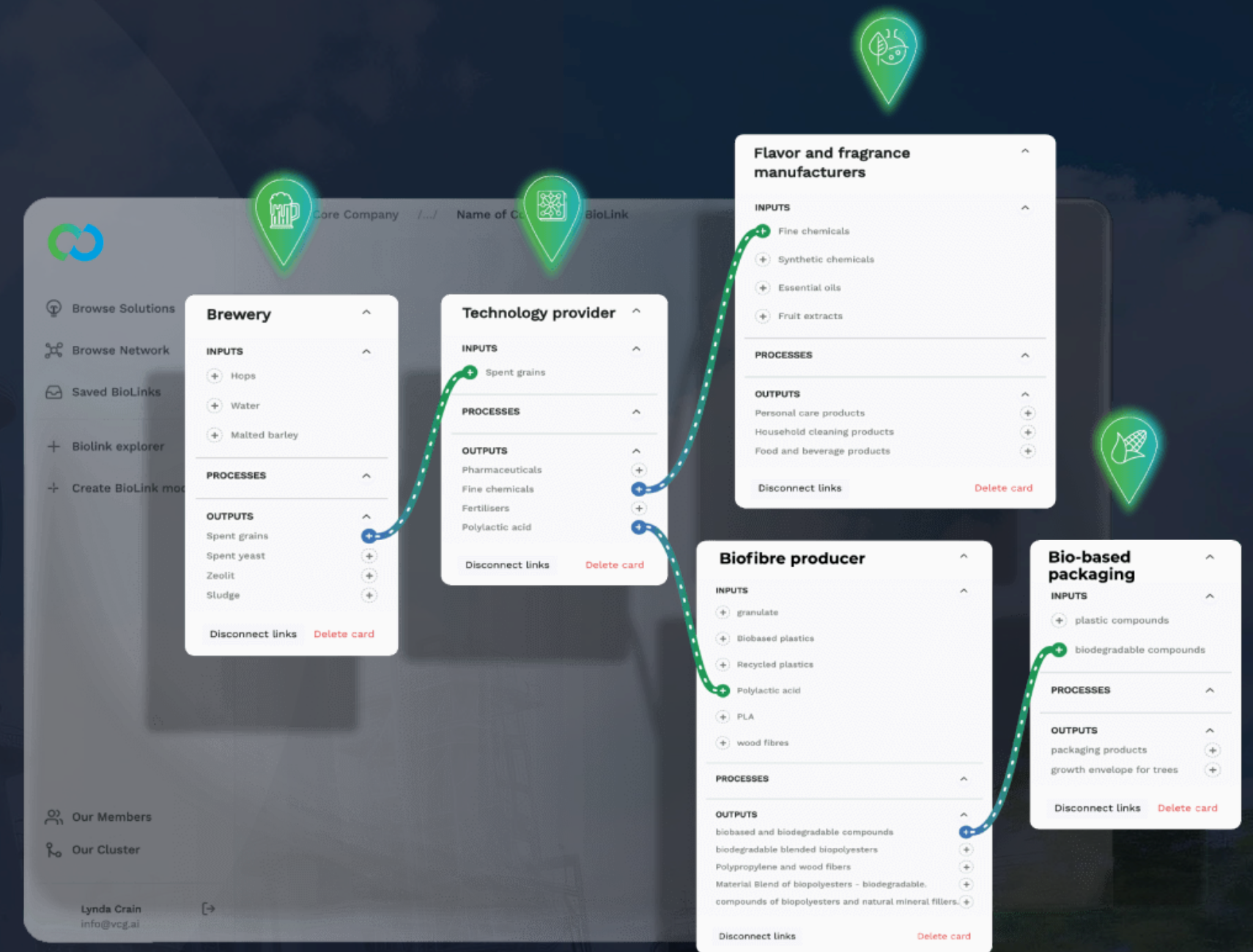




VALUE CHAIN GENERATOR®

Turning by-products & waste into valuable materials across supply chains and regions



An opportunity: Wasted

Today over

85 %

of organic by-products and waste fail to reach their full potential in creating high-value products!

45 Billion €
cost of waste
for the EU agri-food
industry every year



EC, 2023



Landfill

**Energy
recovery**

Compost

Feed



Regulations & markets are driving an industry-wide change in how we use and choose materials



Push: Regulations for higher valorisation of waste & industrial decarbonisation



Pull: 2.6 Trillion EUR global market for circular bio-based products*

To reach Net Zero climate goals, we must reduce the climate impact of the industry, through



REGIONAL SOLUTIONS

tailored to the region-specific industrial ecosystem and material flows

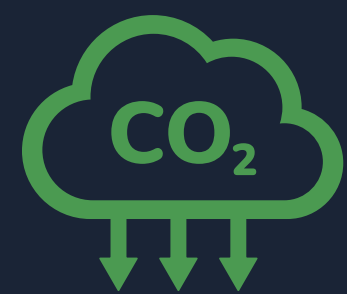


TECH INNOVATIONS

to enable the circular business models & industrial decarbonisation

Value Chain Generator®

Advanced data analytics to find & develop opportunities for turning by-products & waste into sustainable resources.



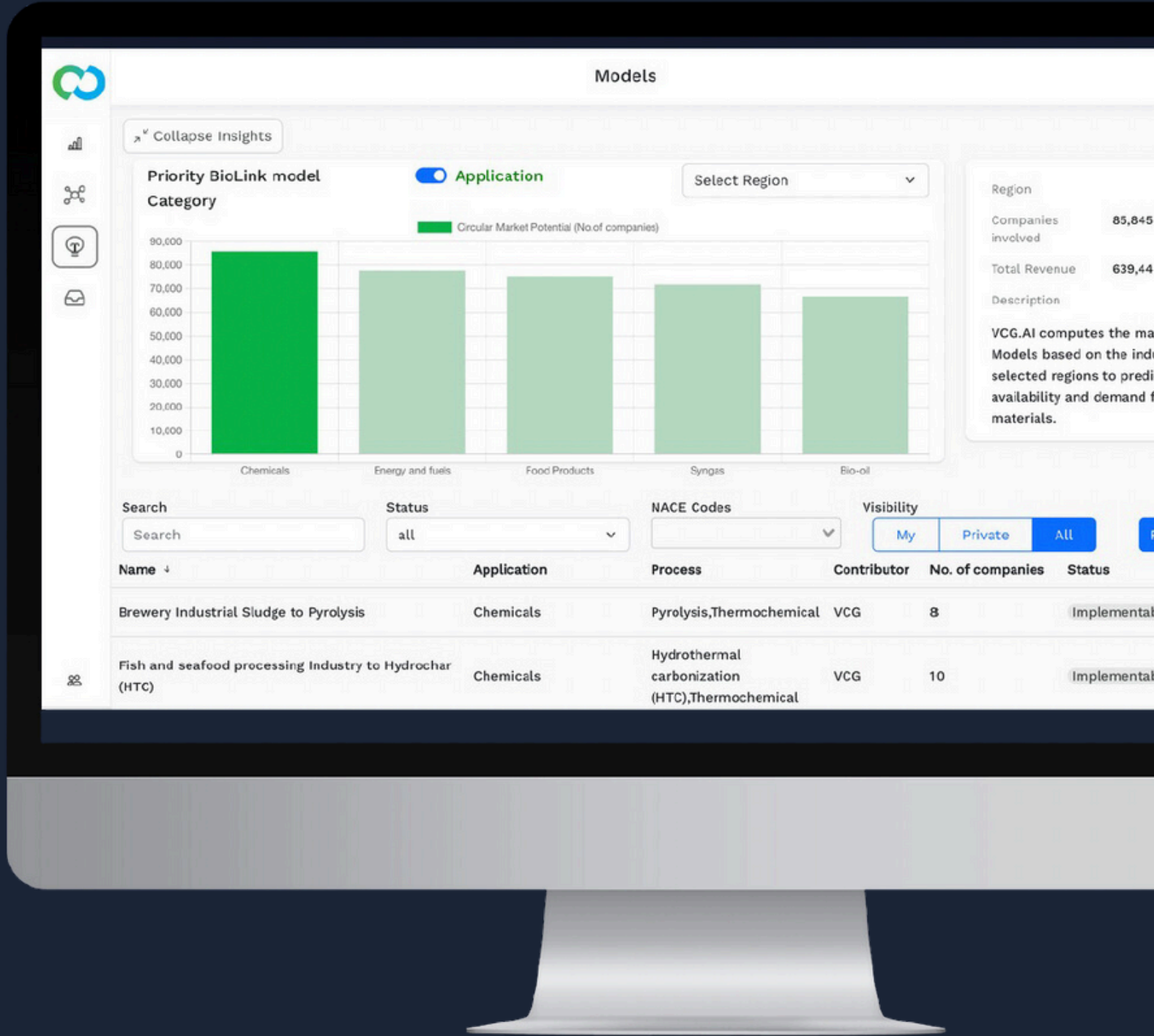
Reduce CO2e footprint



Reduce material & water waste

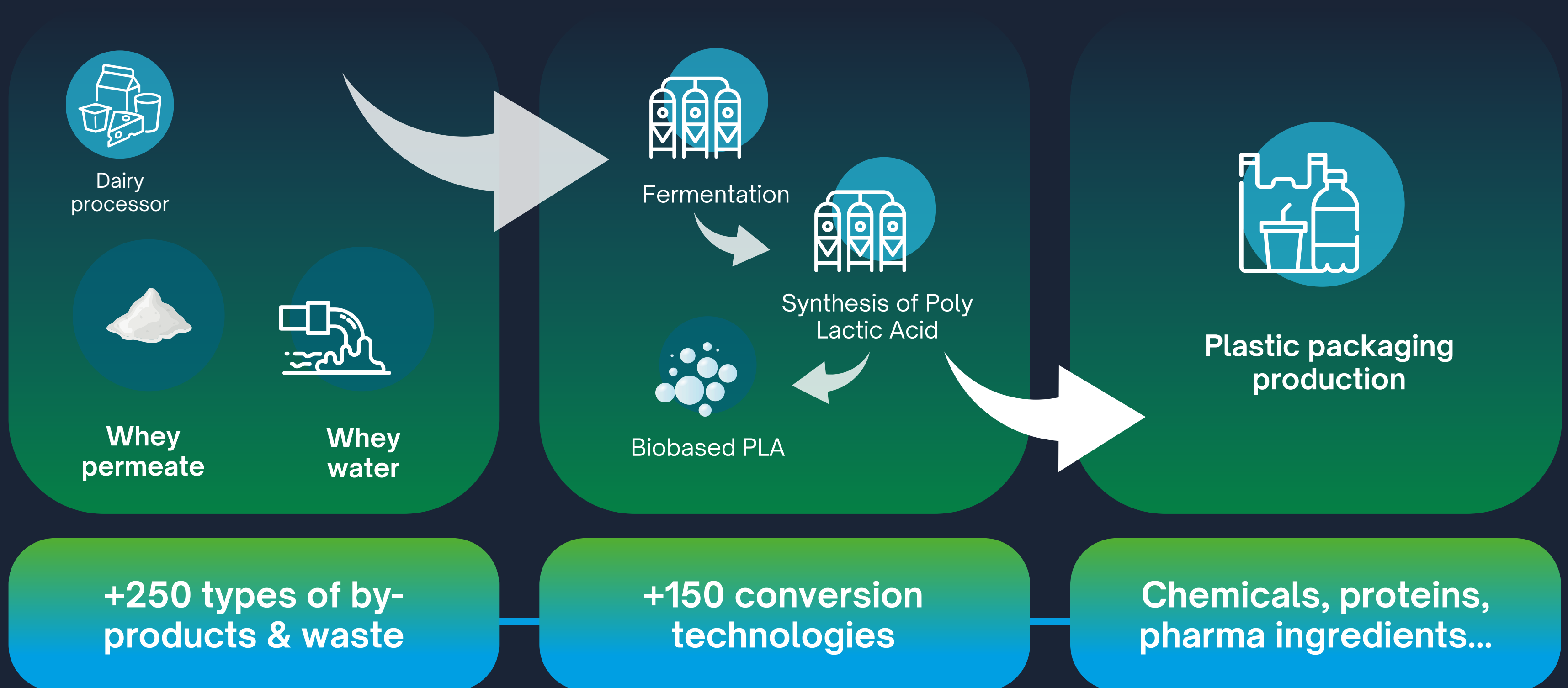


Improve profitability



BioLink[®] Algorithm

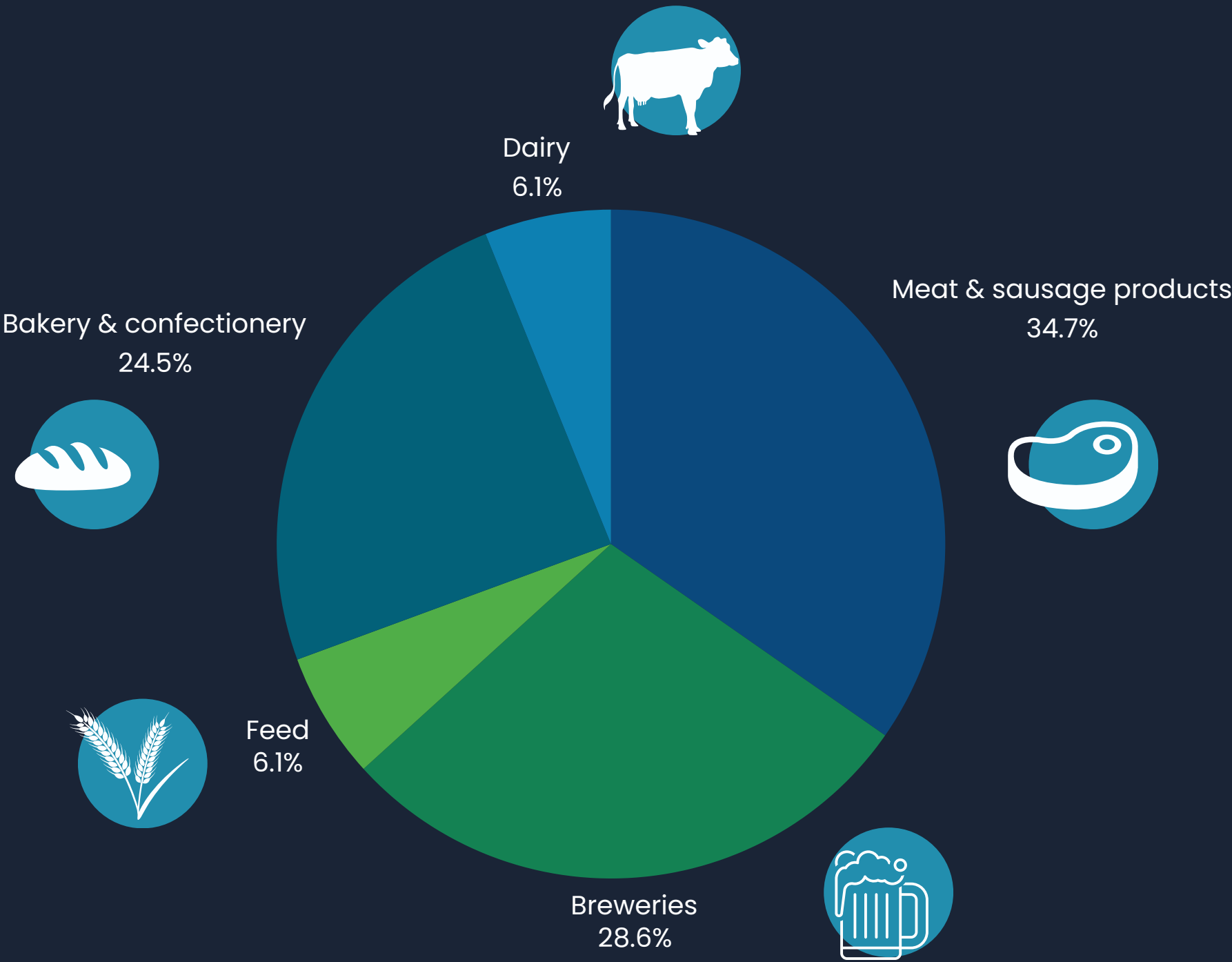
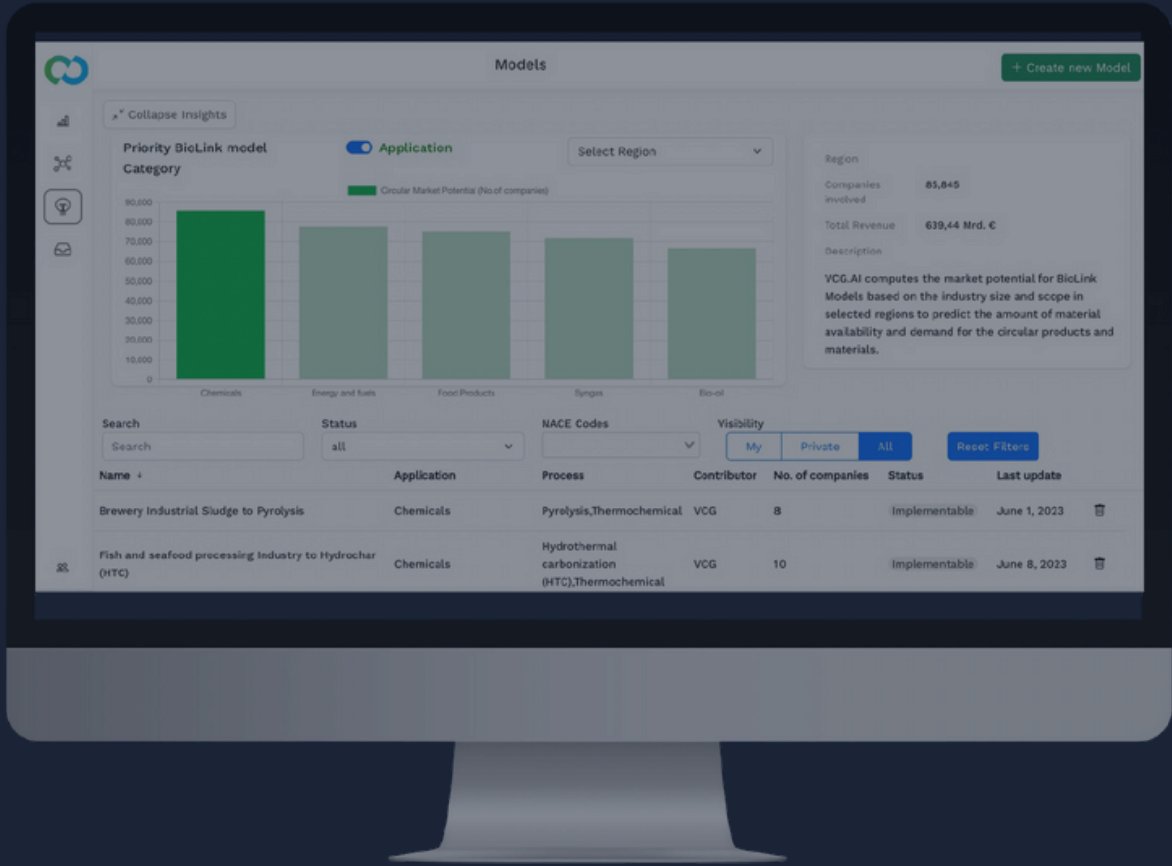
EXAMPLE



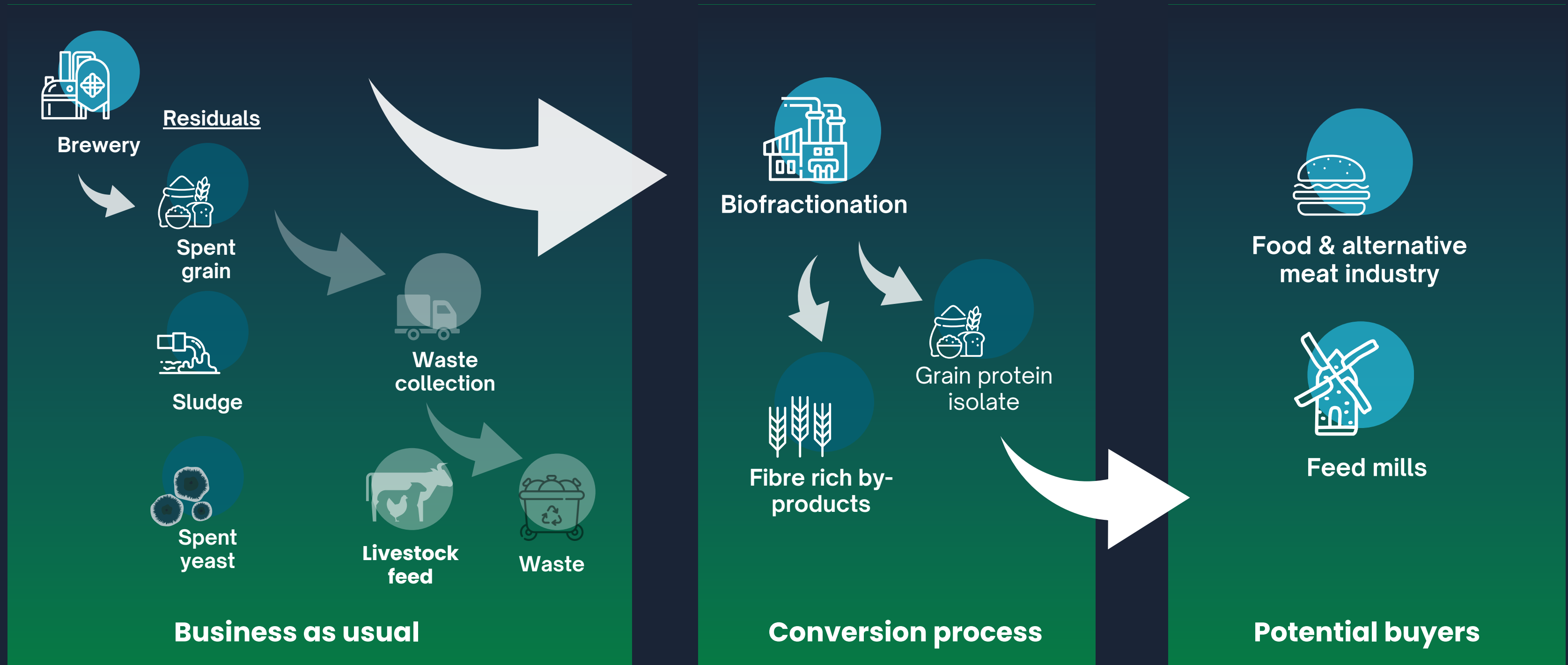
CASE STUDY: UPPER AUSTRIA REGION

**How Value Chain Generator supported Upper Austria to
advance circular bioeconomy in the region**

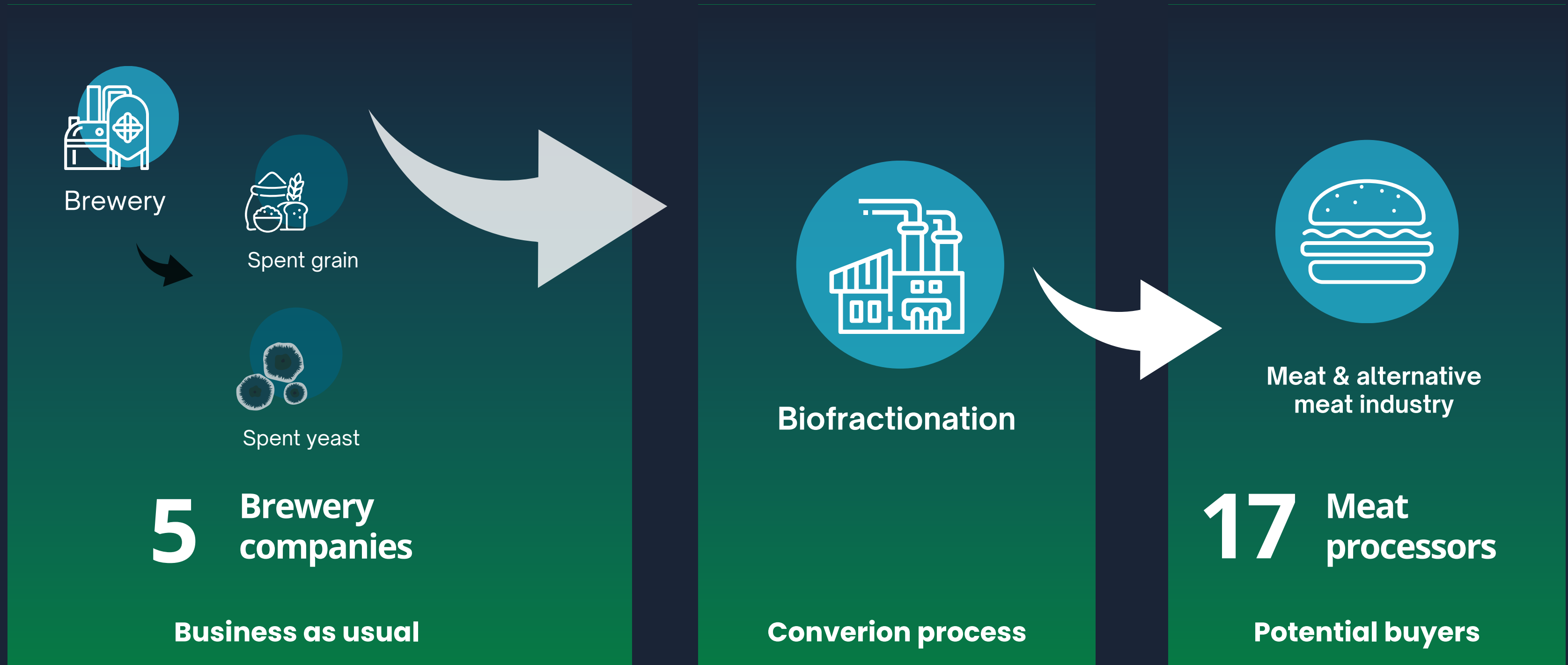
High-priority industries and residuals in the region



Brewery residuals to produce high value proteins and fibers

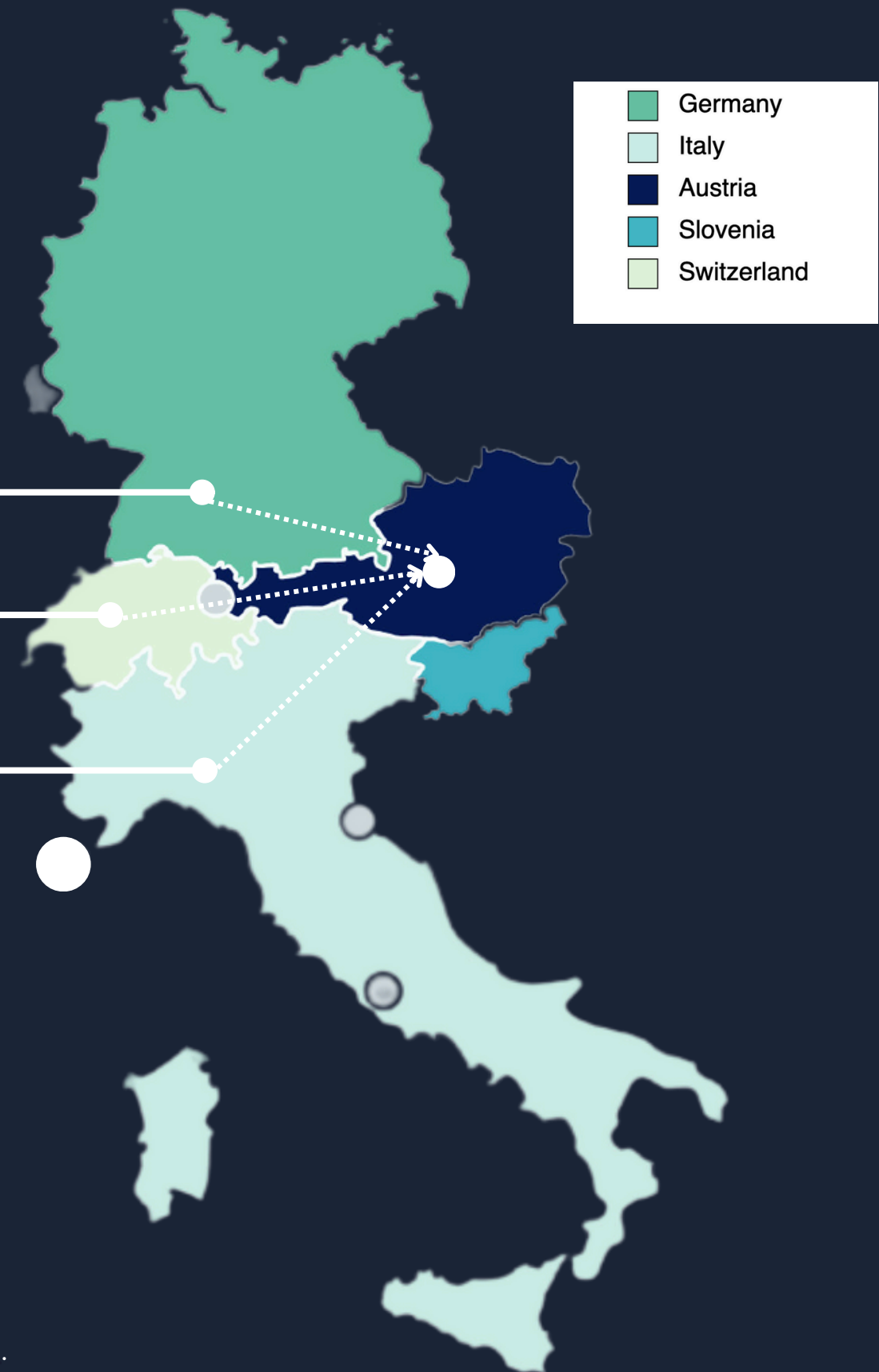


Matching of regional companies



Addressing the gap in the BioLink

The region is **missing the technology providers** for the production of protein isolates. The right technology providers can be found in the VCG network.



Fraunhofer

btg
bioliquids

BiCT
BIOTECHNOLOGY INNOVATION

bering
PROCESS SOLUTIONS

ACIES BIO

BIOREFIC™
Biorefinery for the Future

Chemie
Cluster Bayern

c-LEcta
A KERRY® COMPANY

UNIVERSITY OF
HOHENHEIM

Hochschule Reutlingen
Reutlingen University

50+

The Value Chain Generator approach



ANALYSE

all the companies
operating in the
region



DETECT

by-products & waste
streams generated
by the companies



PRIORITISE

the circular solutions by
their market potential
and climate impact



MATCHMAKE

the right supply chain
& technology partners
for implementation



Analytics of regional companies & material flows



Available by-products & waste streams + suppliers

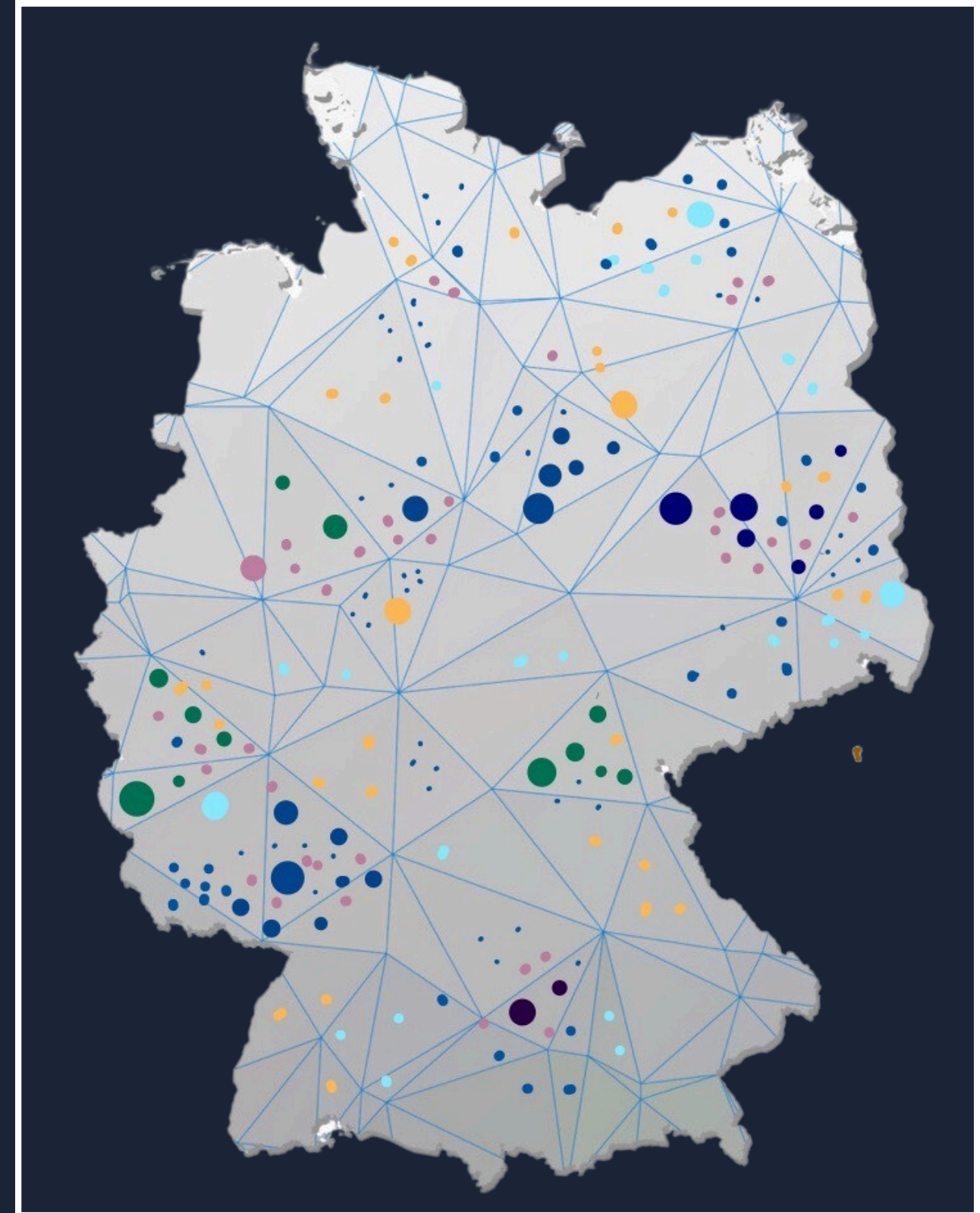


Potential buyers of various new circular products

Type

Location

Amount



BioLink® to find circular business opportunities

BioLink matches residuals with conversion technologies and demand for circular materials.

It finds the optimal way to valorise every residual and alternative circular materials for every production input.

Factors considered

Materials

Tech &
business
models

Logistics



Confirm the opportunities before making further investments

To de-risk further investments, BioLink AI allows us to evaluate the techno-economics & climate impacts of each circular opportunity.

+100,000 documents
Science, technology, business models
& climate impacts



Matchmake to develop chosen circular opportunities

Matchmake the right regional companies to develop the supply chains.

- Supply of residuals
- Demand for the new circular resources.



International deployments in 2024

13
Countries

35
Regions





Advanced data insights for regions to decarbonize
through profitable circular value chains

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