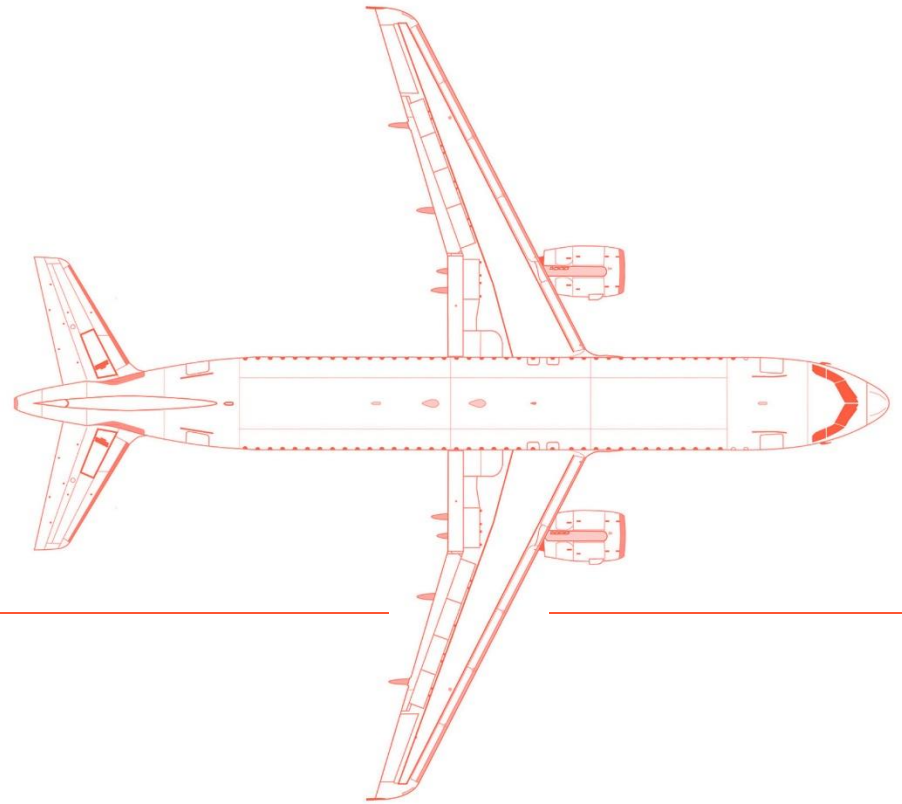
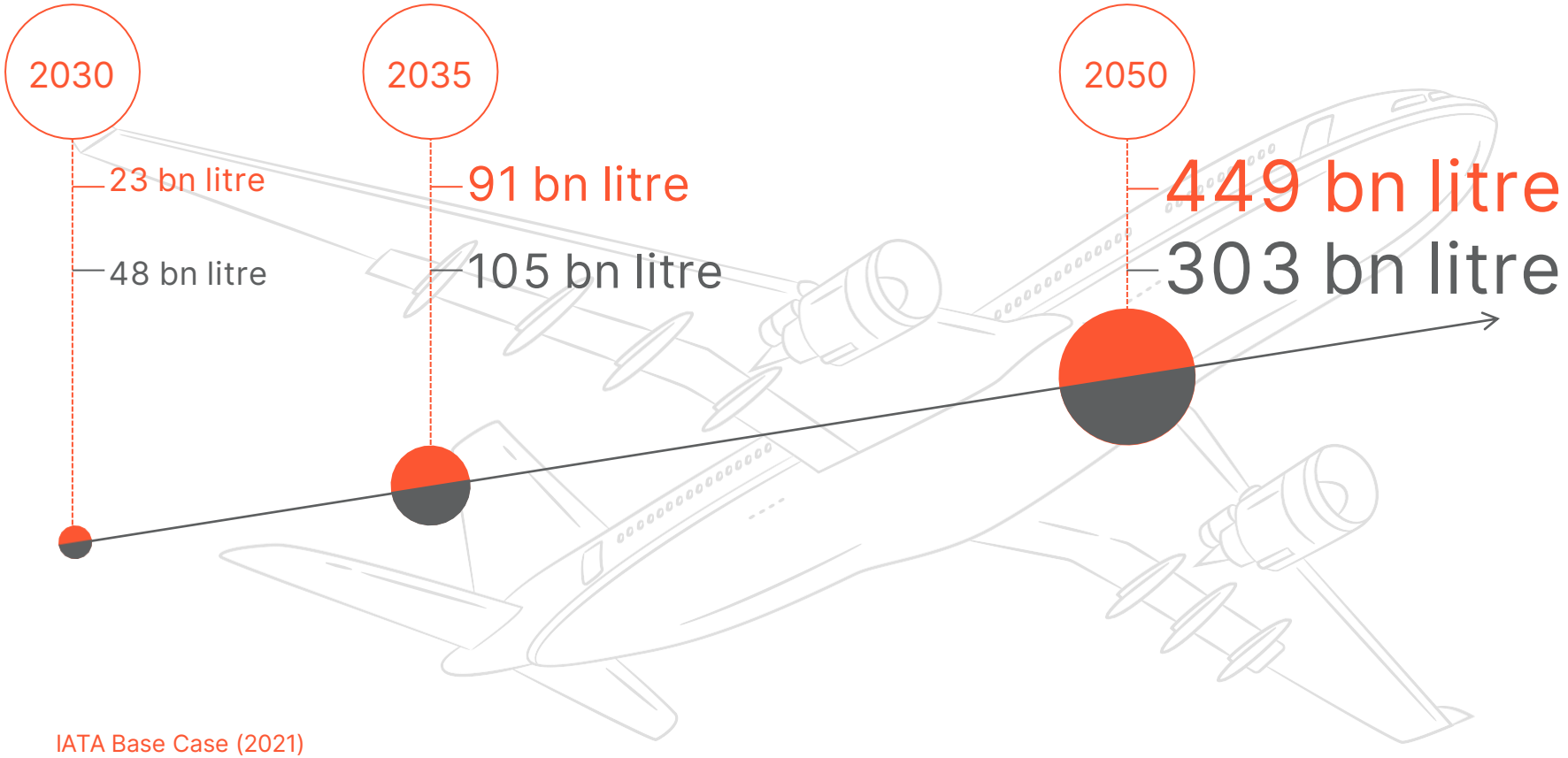
metafuels

Powering the future of air travel with sustainable aviation fuel



SAF market size



IATA Base Case (2021)
IEA Data (2023)

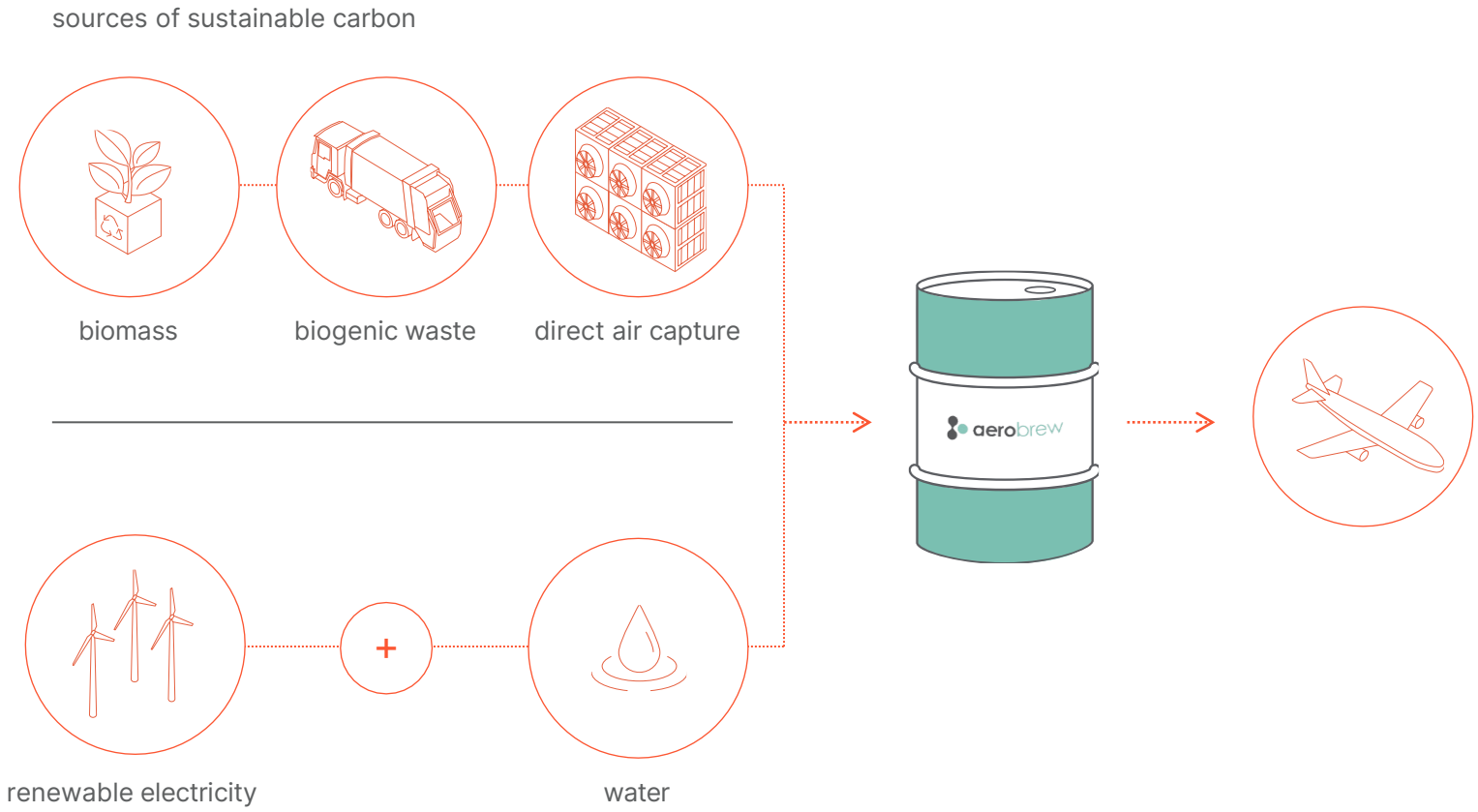
70%

of jet fuel market expected to be SAF by 2050.

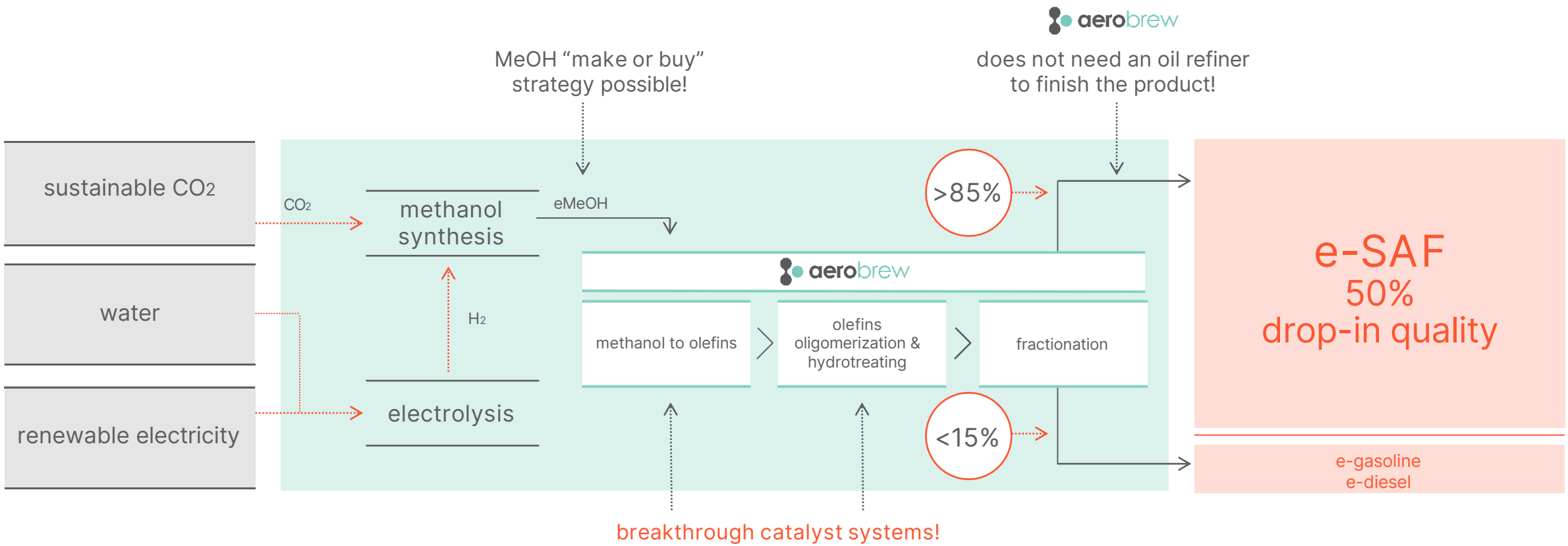
Various jurisdictions, e.g. EU, introducing SAF blending mandates, including sub-mandates for eSAF.

Process

- aerobrew is an efuel technology, promising to make affordable net-zero aviation a reality.
- Leverages nanotechnology, to produce eSAF from green methanol with ultra-high yield.
- Integrated into renewable energy systems and independent of food and feed supply chains.



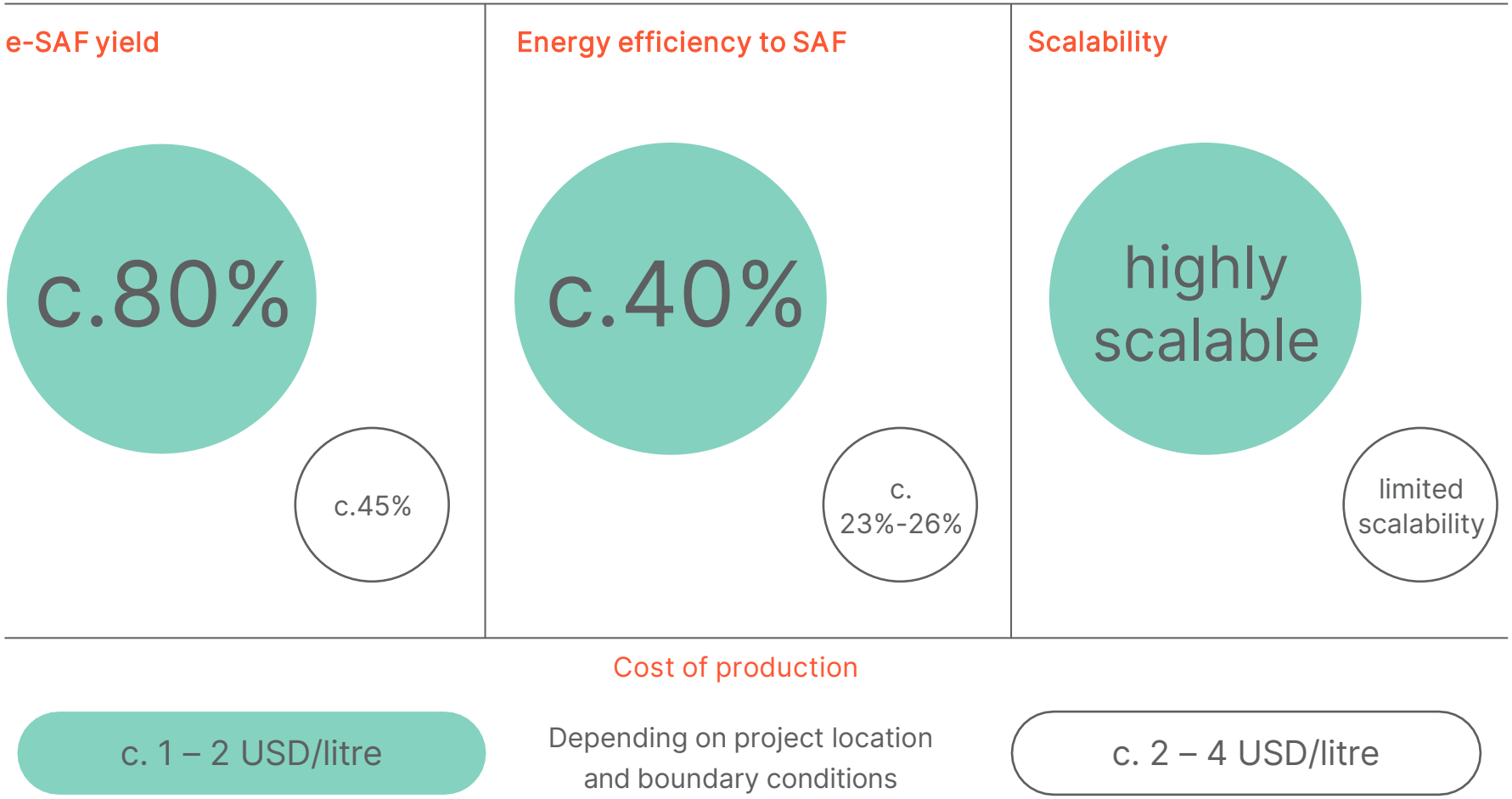
aerobrew e-SAF production plant



feedstocks | aerobrew core units | integrated methanol-aerobrew production plant | liquid products

aerobrew techno-economics

aerobrew vs competition for e-SAF production



aerobrew

- makes best use of valuable sustainable carbon through ultra-high SAF yield
- uses renewable energy resources most efficiently, and
- has lowest cost of production

Scalability up to

2000

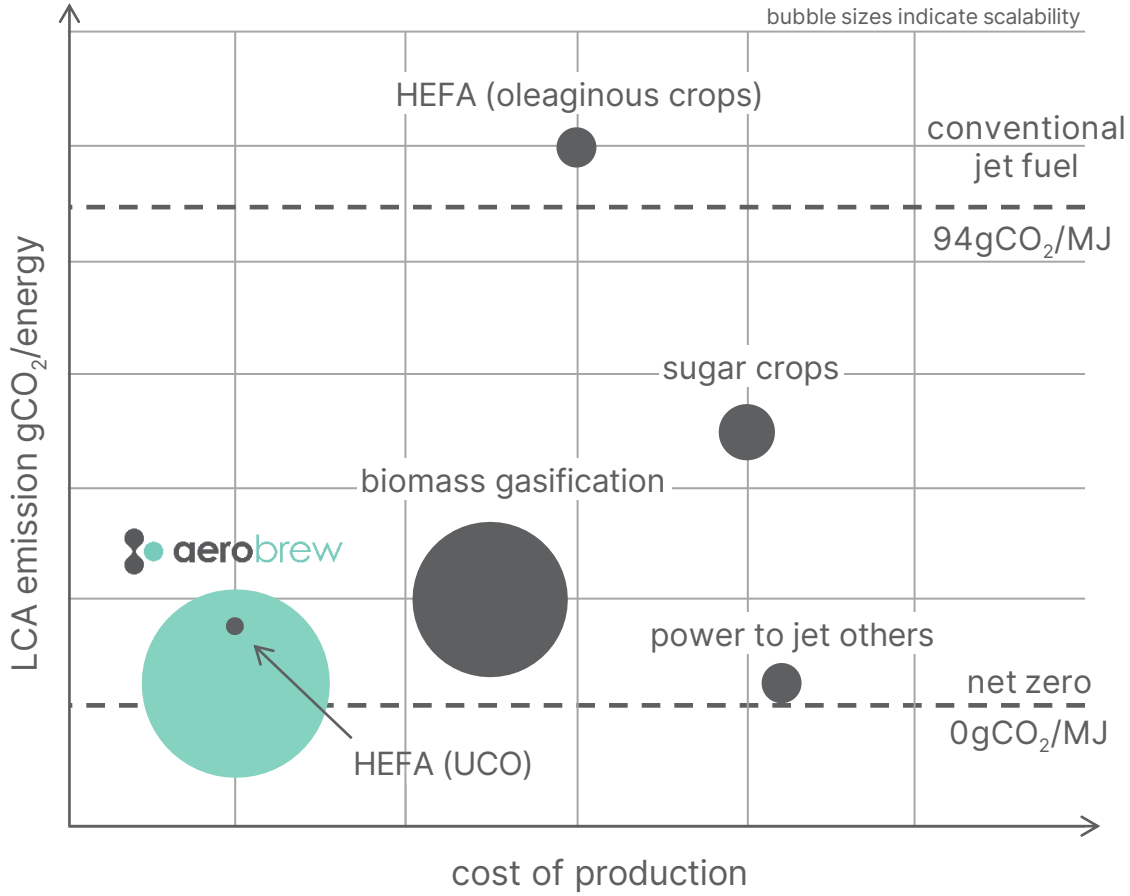
ton/day

aerobrew

competition

USPs

- Cost leadership through ultra-high yield and high efficiency
- Environmental performance
  - significant reduction in lifecycle emissions compared to conventional jet fuel (up to 90%)
  - avoiding “food or fuel” dilemma of biofuels and associated emissions from displacing food crops (indirect land use change)
  - low water consumption
- High scalability with technology placing no constraint on plant sizes



Technology development

2020-onwards

Product development and testing

- IP development and protection
- optimisation of catalyst and process
- developing supply chains
- generation 2 performance fuels

2024-2026

Mini pilot
1-2 litre per day

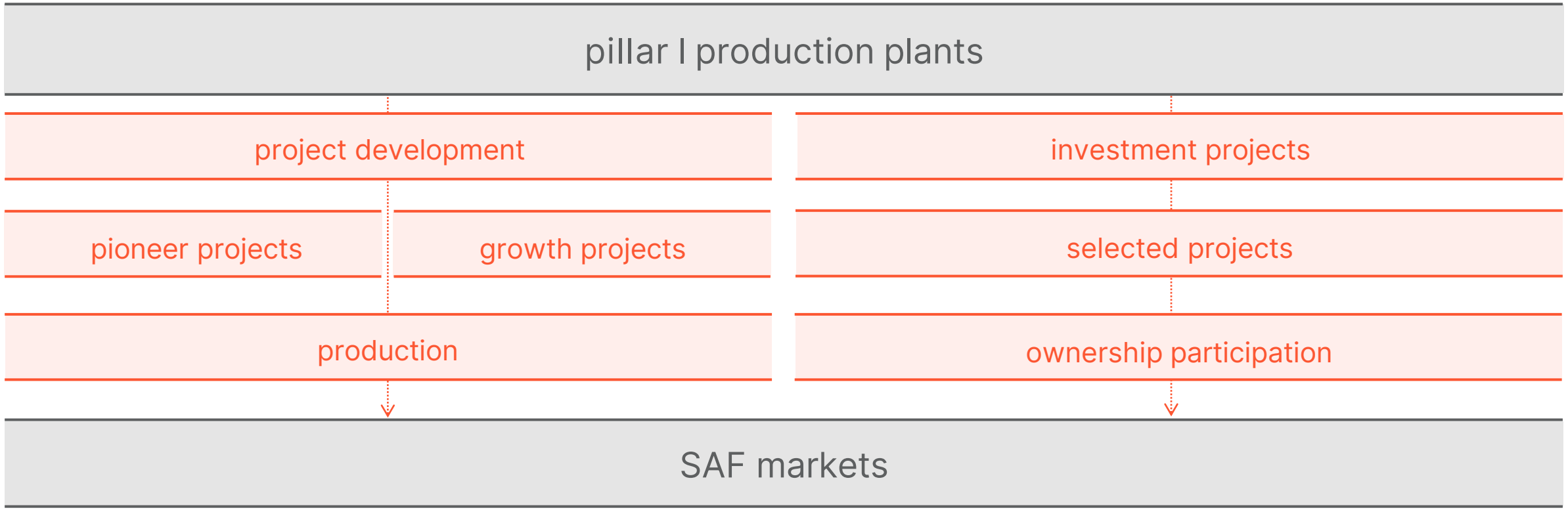
- catalyst testing
- reactor system testing & optimisation
- pilot plant pre-trials

2025-2026

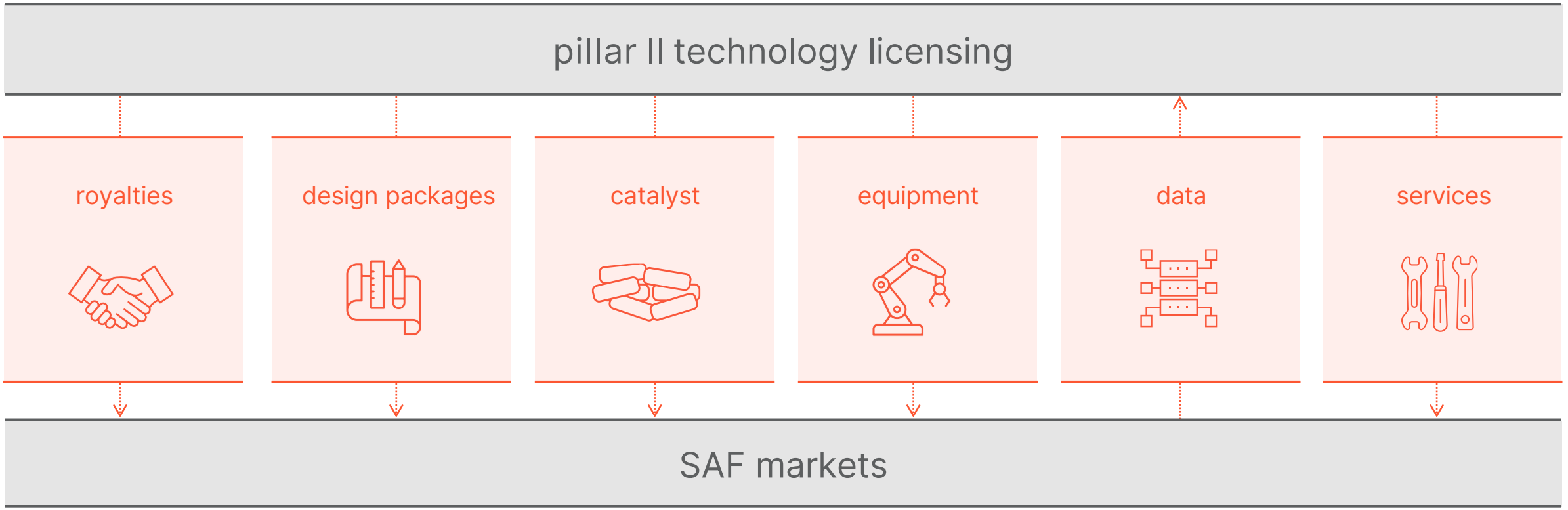
Pilot plant
ca. 50 litre per day

- technology demonstration facility
- fuel for ASTM D4054 certification
- testing supply chains
- process simulator development

Business model



Business model



Commercialisation

2023-2028

Pioneer plant(s)

ca. 3.5 million litre per year

Developing and implementing first scale-up projects; establishing technology in the market

Building commercial arrangements: securing sites, feed and offtake agreements, etc.

FEL-1 kicked off for first Pioneer

Maturing supply chains (catalyst, prop equipment)

from 2028

Growth

plants of up to 700 million litre per year

Production plants and licensing

- Project development activities continue
- Leverage investment opportunities
- Expand third party licensing business

United in cause, complementary, determined - the leadership team

Saurabh Kapoor, CEO
B. Eng. (Mechanical)

Dr. Leigh A. Hackett, Chairman
CEng, FIChemE

Ulrich Koss, CTO
Dipl. Ing. (Industrial)

Investors

ENERGY IMPACT PARTNERS

Contrarian Ventures

Technology development partner

PAUL SCHERRER INSTITUT PSI

metafuels

Come join us!

We’ve come a long way in a short time.
But our journey is just getting started.