



FOOD OUT OF THIN AIR

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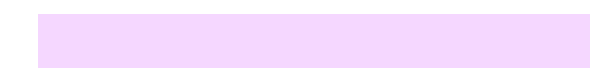
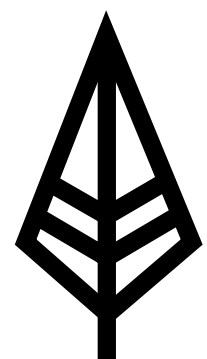


VISION

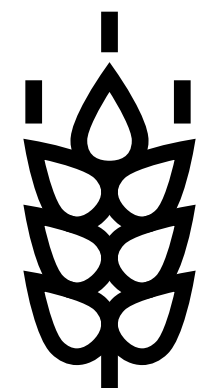
ON THE NEXT WAVE OF EVOLUTION



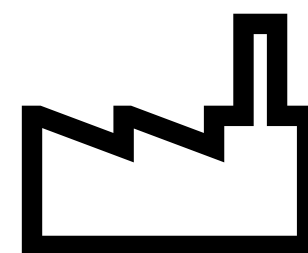
FOOD PRODUCTION DEFINES OUR SOCIETIES



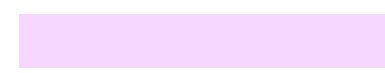
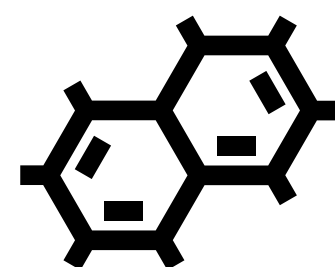
100 000-10 000 BC
HUNTER-GATHERER
SOCIETIES



10 000 BC-1700 AD
THE AGRICULTURAL
SOCIETIES



1700-2000
THE INDUSTRIAL
SOCIETIES



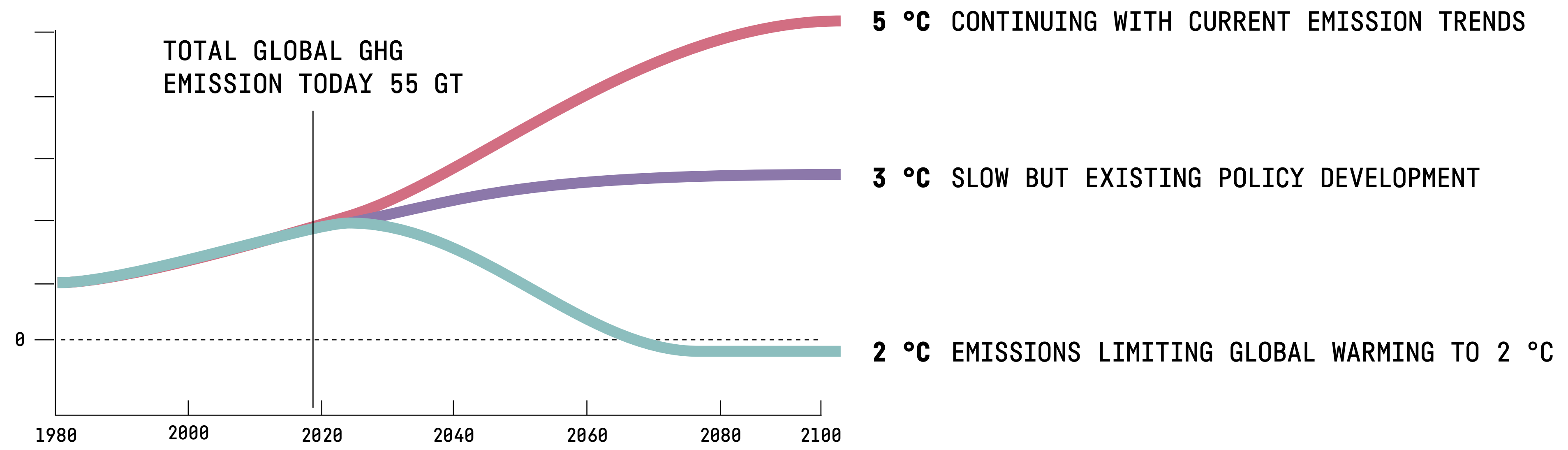
2000-
NEW FOOD
REVOLUTION



THE PROBLEM

CONVENTIONAL FOOD PRODUCTION IS RUNNING OUT OF TIME.

CO₂ EMISSIONS MUST BE CUT FAST

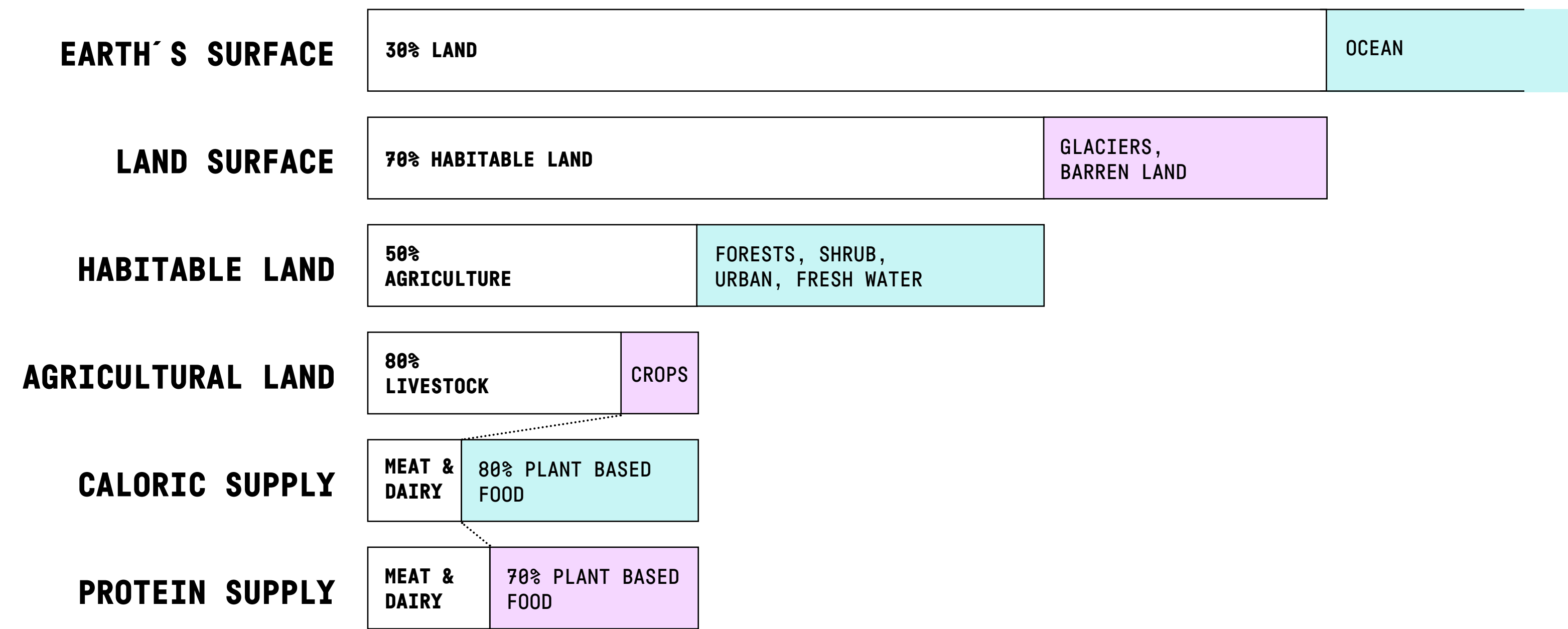


SOURCES OF GLOBAL GREENHOUSE GAS EMISSIONS

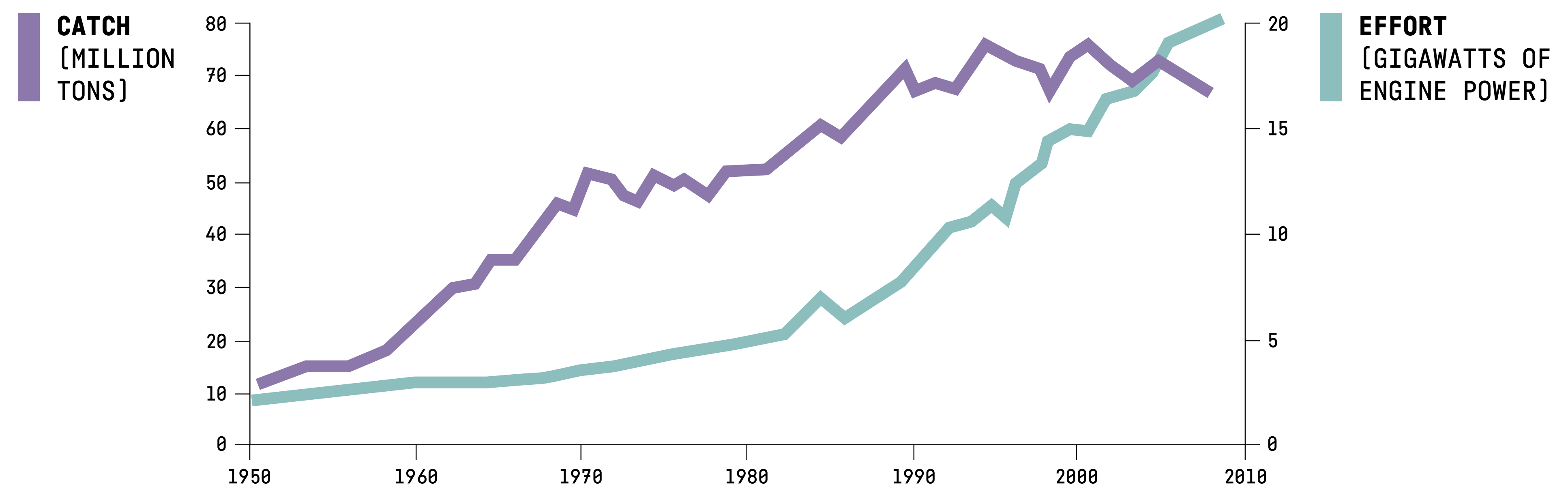
 | **80%** ENERGY

 | **20%** FOOD PRODUCTION AND LAND USE CHANGE

40% OF HABITABLE LAND CONSUMED BY LIVESTOCK



GLOBAL FISH CATCH PEAKED 20 YEARS AGO

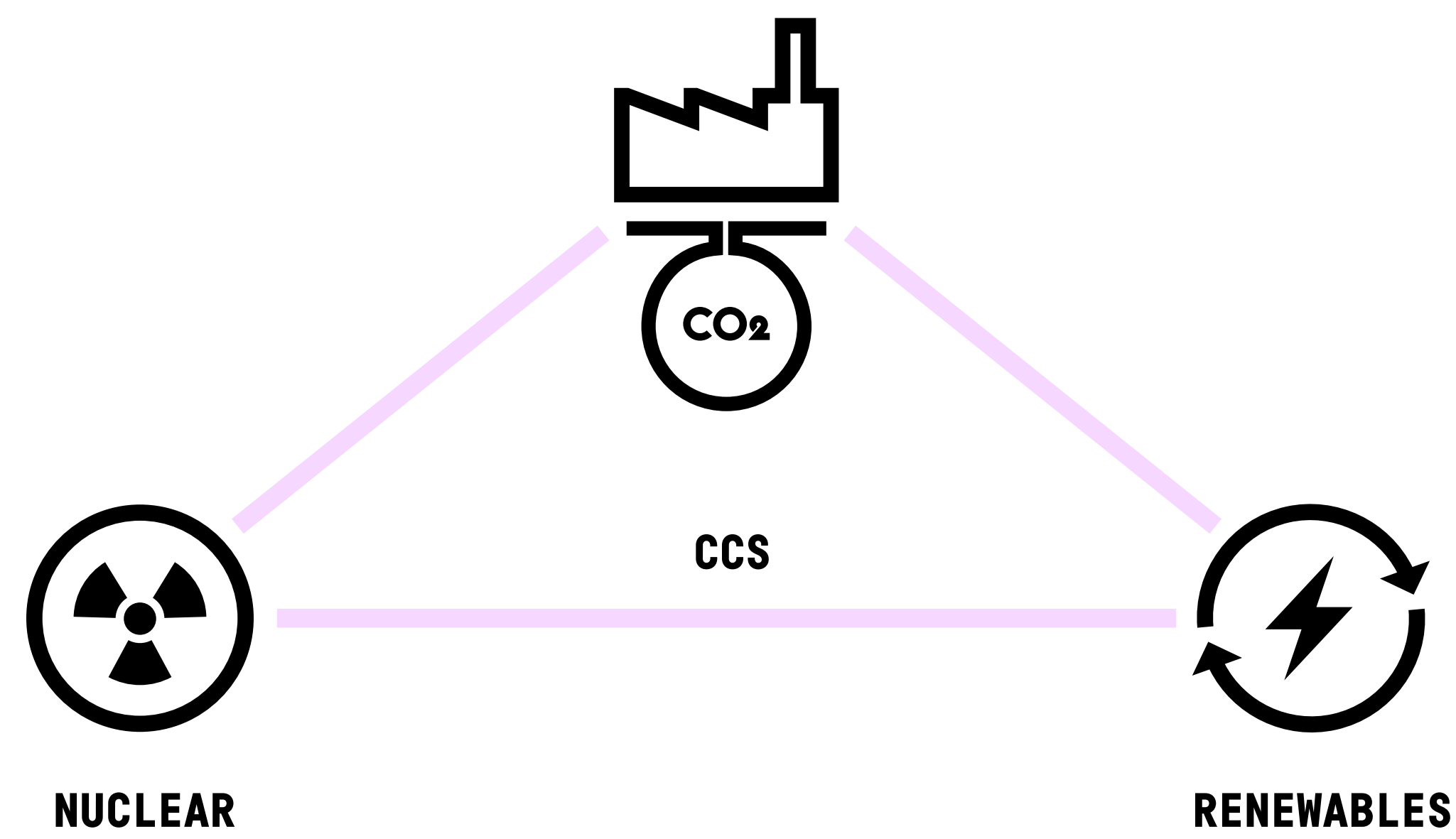




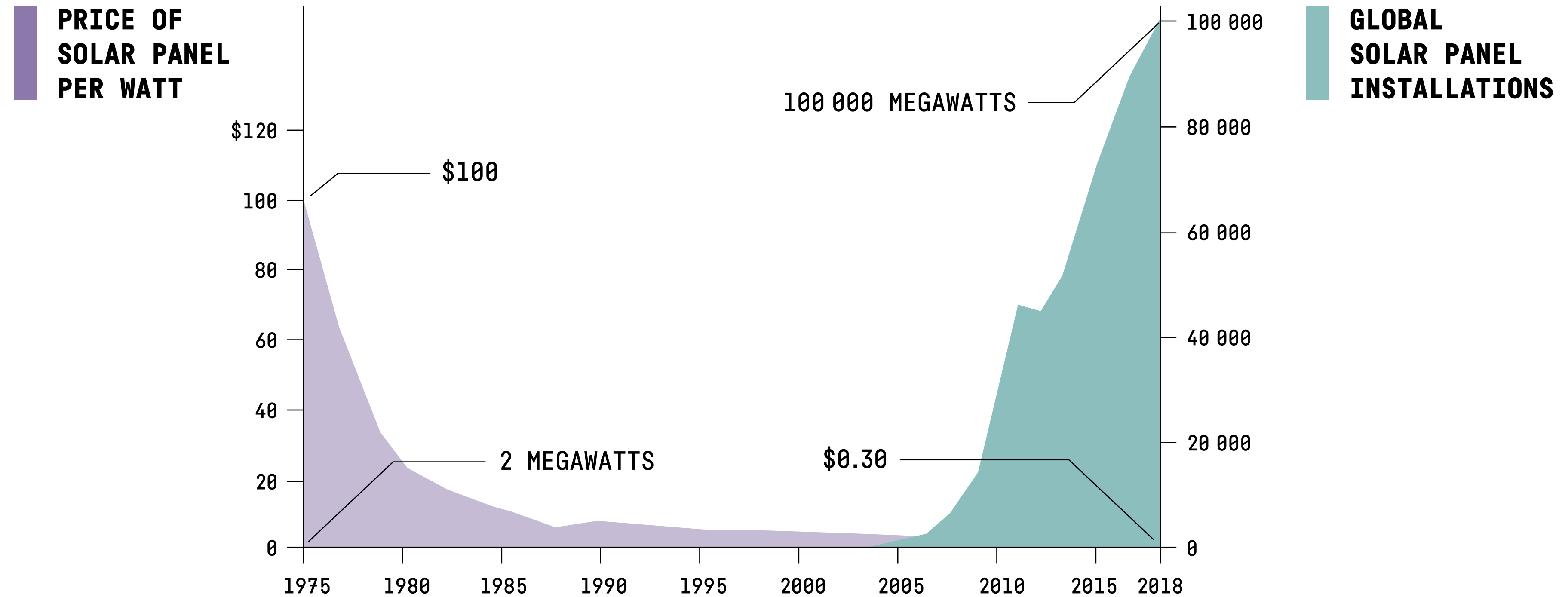
THE SOLUTION

FREE FROM AGRICULTURE.

ELECTRICITY: THE NEW PRIMARY ENERGY

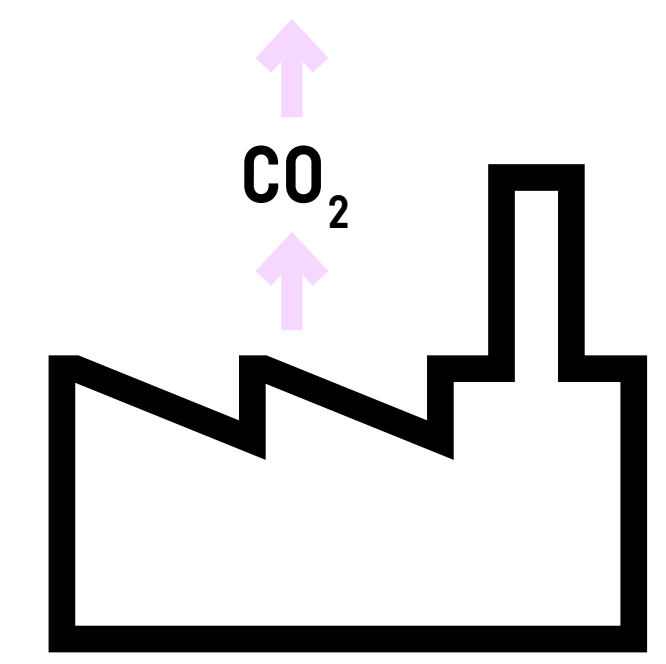


CHEAP ELECTRICITY EQUALS RAW MATERIAL



SWITCHING TO A CIRCULAR CARBON ECONOMY

TODAY

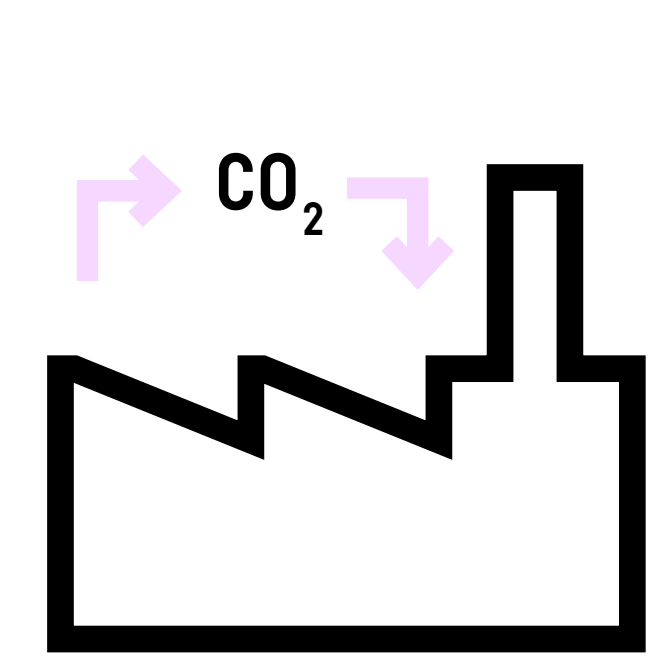


REFINING AND USE



FOSSIL CARBON

FUTURE



REFINING AND USE

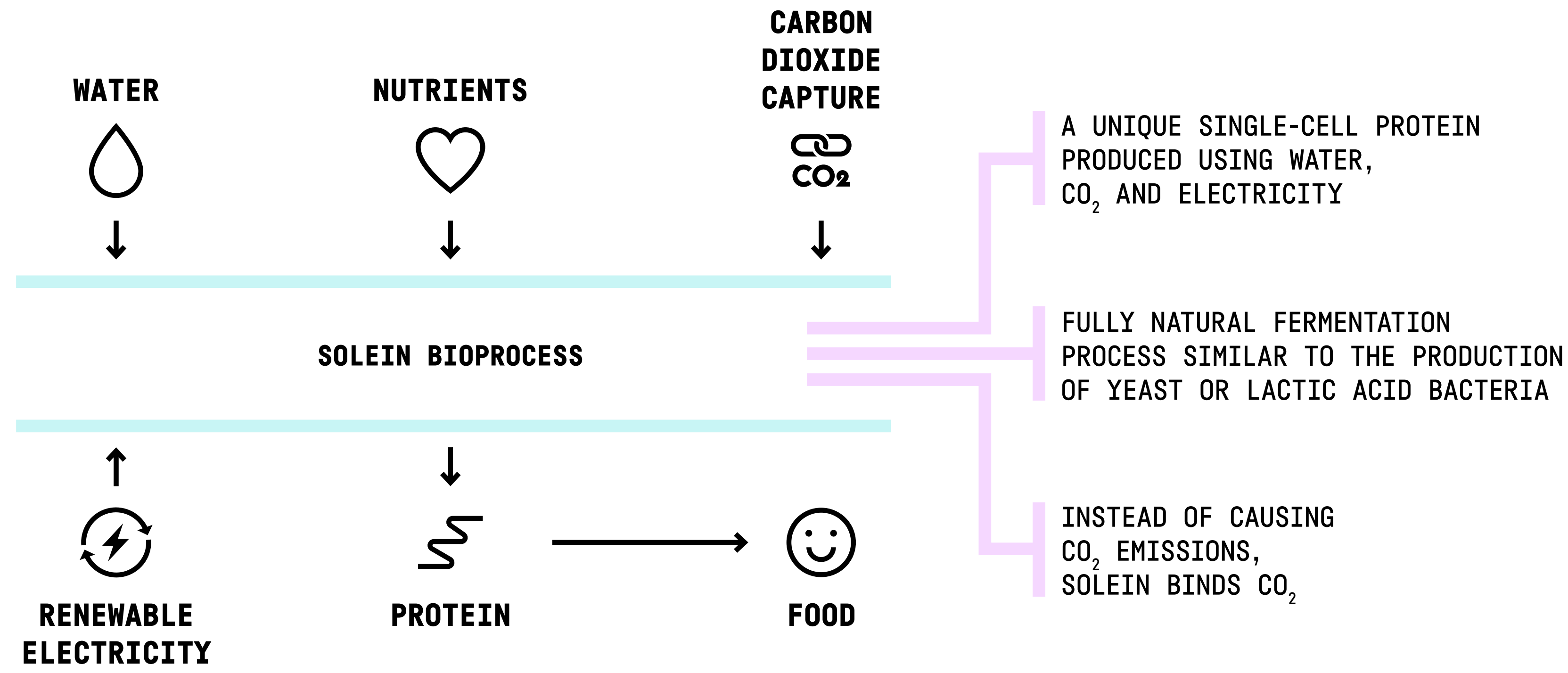
FOSSIL CARBON



INTRODUCING SOLEIN®

PURE PROTEIN MAGIC.

DESIGNED BY NATURE



FORTUM PROVIDES SOLAR FOODS 100% RENEWABLE ENERGY

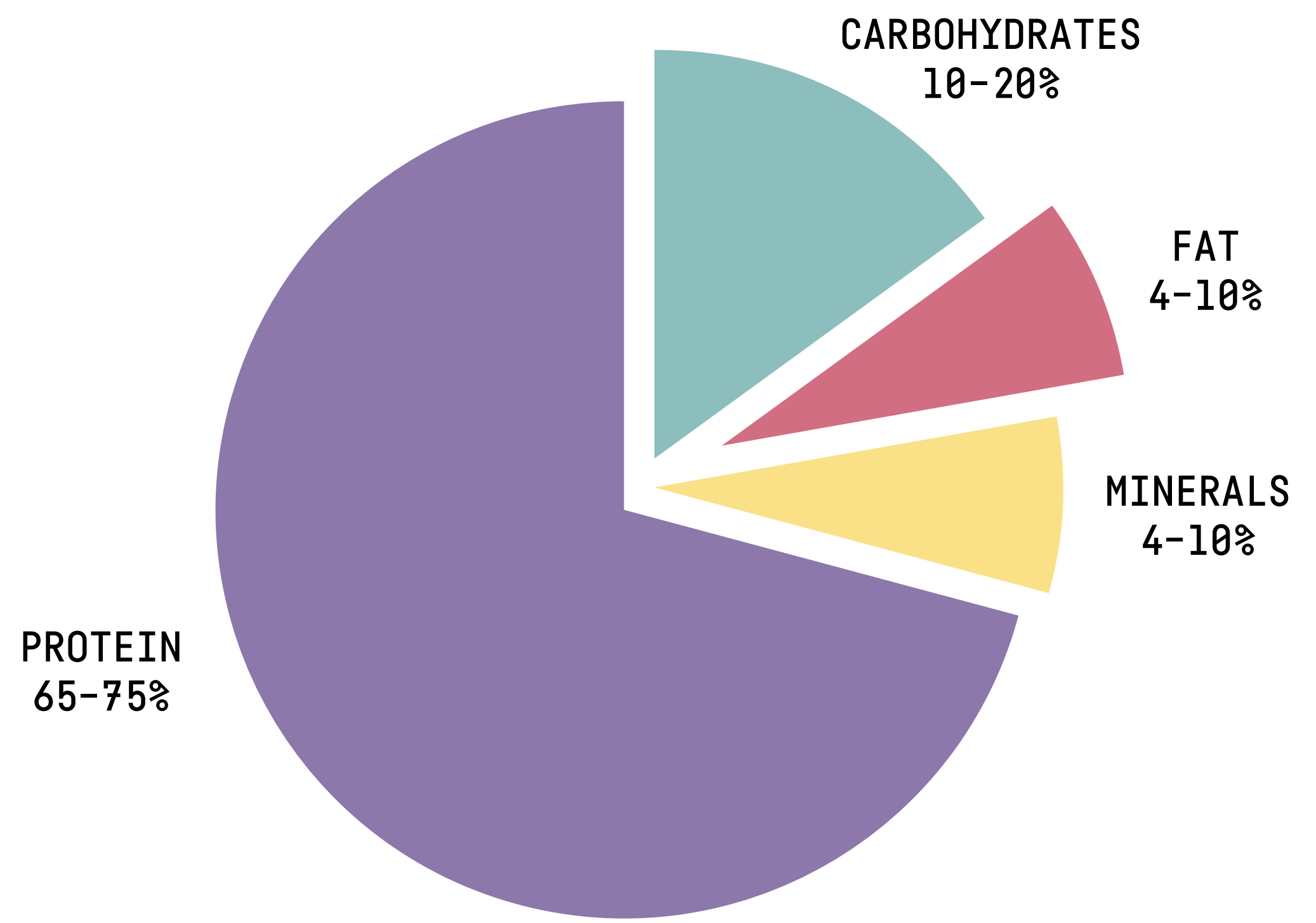


DISCOVERED BY SCIENCE.

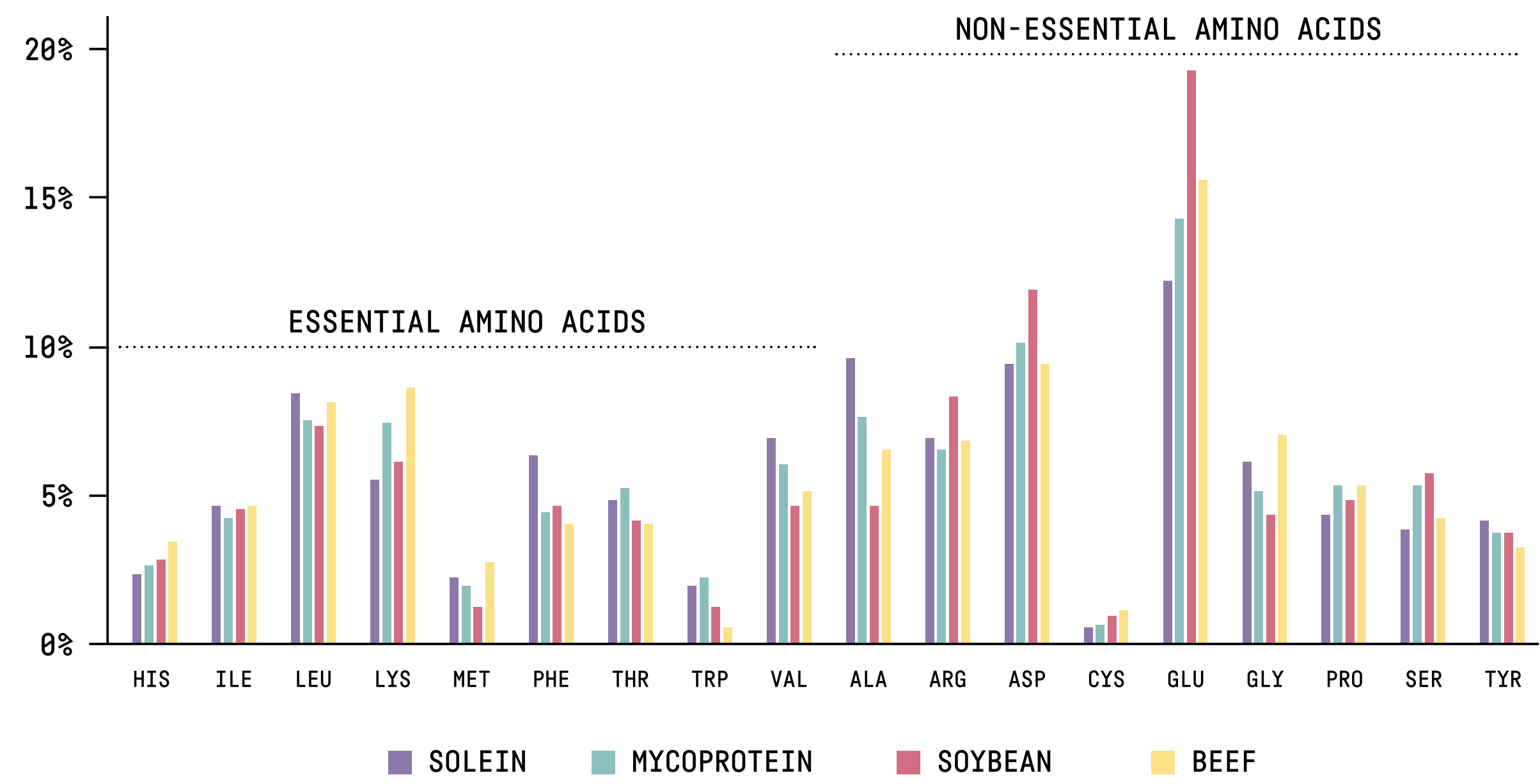
Inspired by NASA and Soviet Union space programmes and further developed by VTT Technical Research Centre of Finland Ltd and the LUT University.

Solar Foods is participating in the ESA Business Incubation Centre Finland by developing a novel food production concept for Mars missions.

SOLEIN COMPOSITION



AMINO ACID COMPOSITION OF SOLEIN COMPARES WELL WITH KNOWN PROTEIN SOURCES

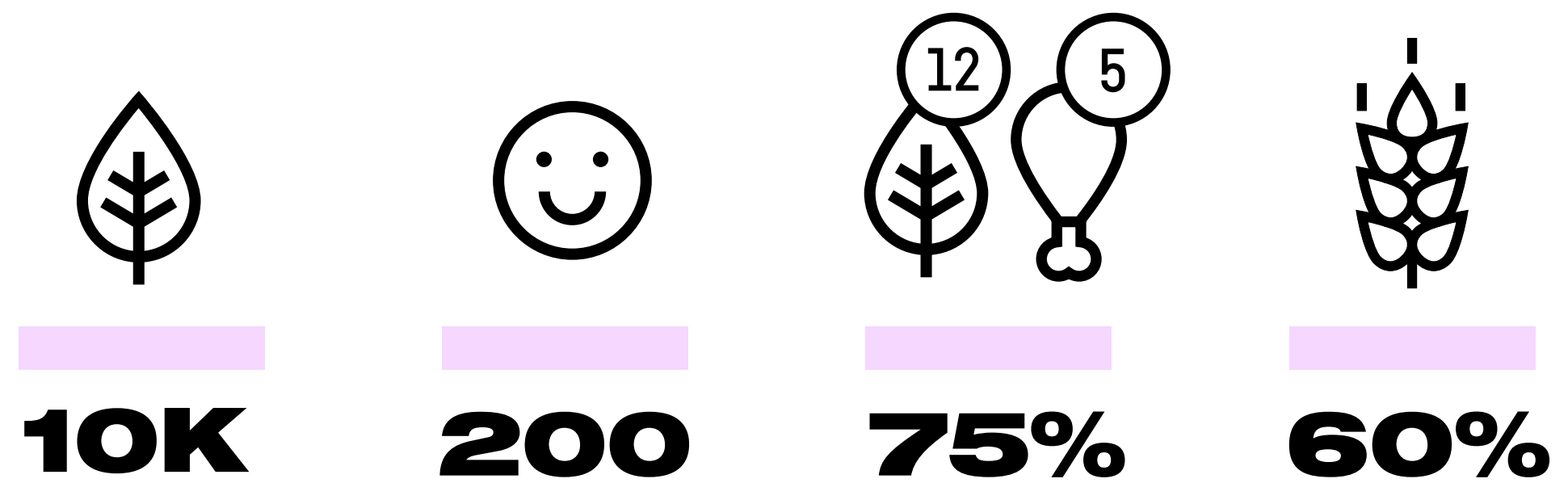




IMPACT

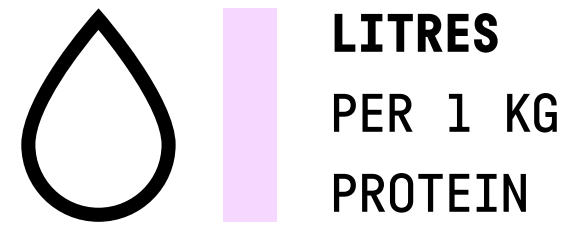
**ECO-FRIENDLY
PLATFORM FOR
NEW FOOD
DIVERSITY.**

CREATING A NEW ERA OF FOOD DIVERSITY



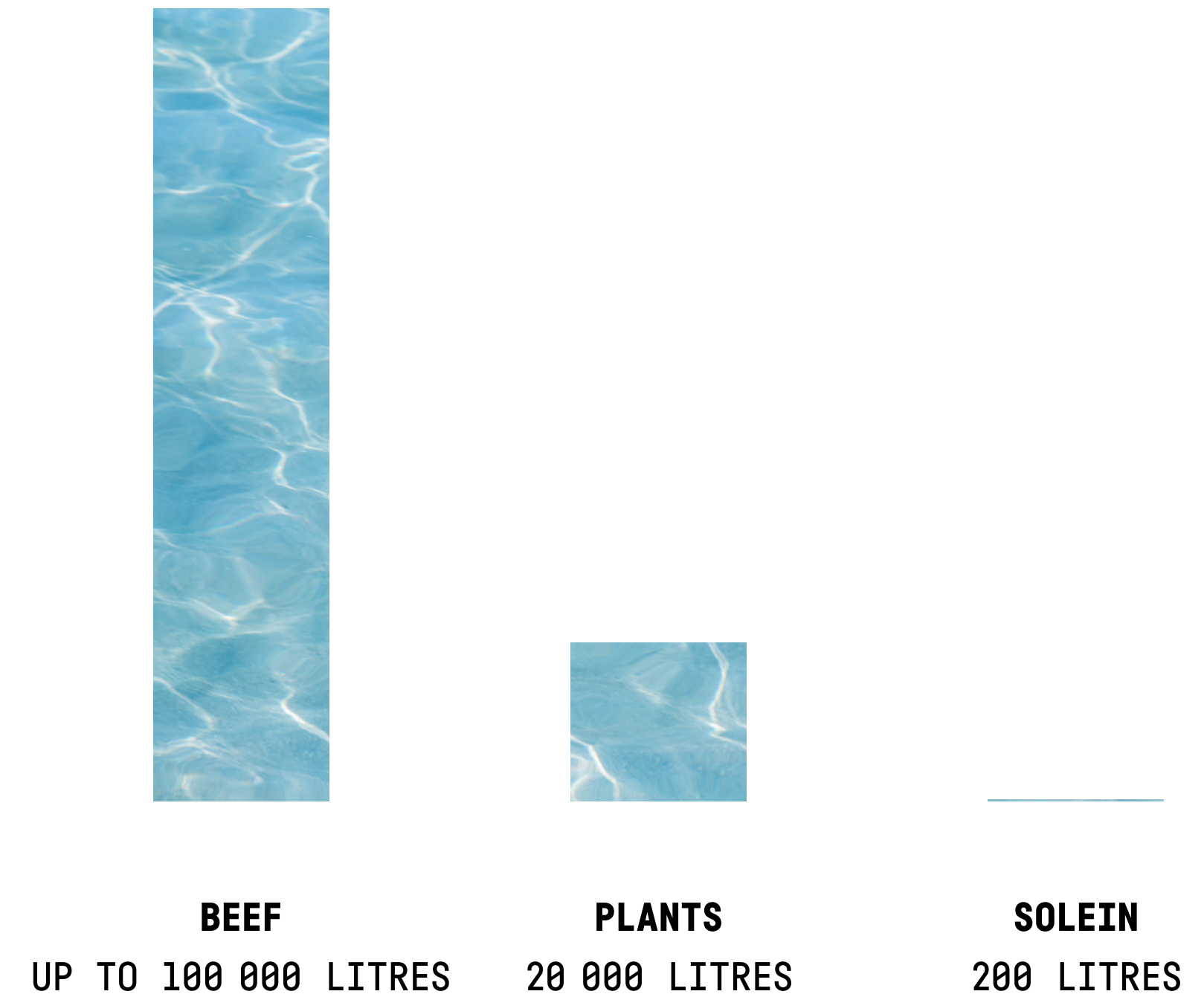
SOLEIN CAN USE THE VARIETY OF 1 000 000 000 000 SPECIES NON-EXPLORED BEFORE, DRAMATICALLY INCREASING THE DIVERSITY OF OUR FOOD CHOICES.

WATERFOOTPRINT

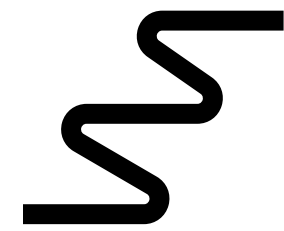


LITRES
PER 1 KG
PROTEIN

SOLEIN USES
100 TIMES LESS
WATER THAN PLANT
PRODUCTION AND
UP TO 500 TIMES LESS
THAN THE PRODUCTION
OF BEEF.

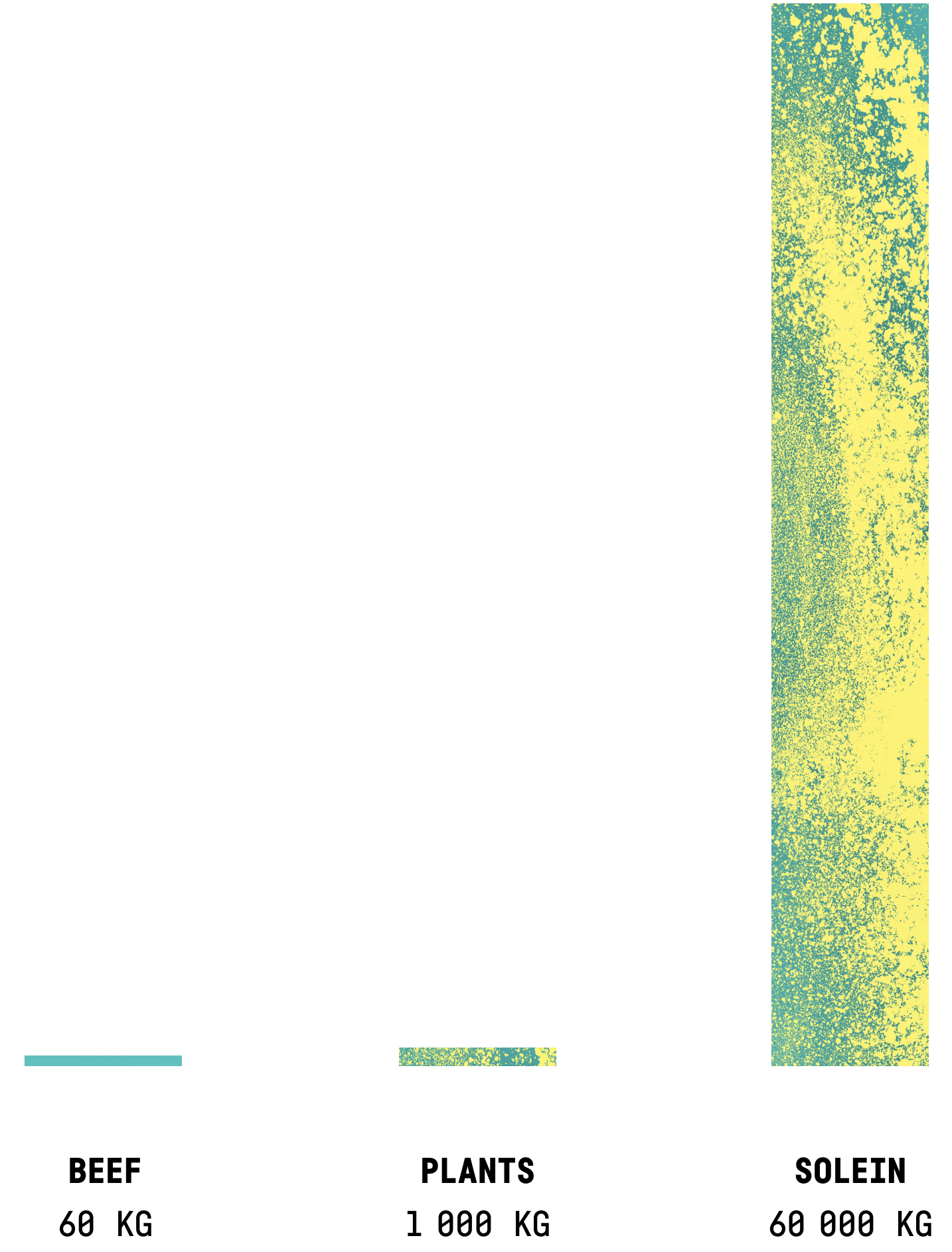


LAND USE EFFICIENCY

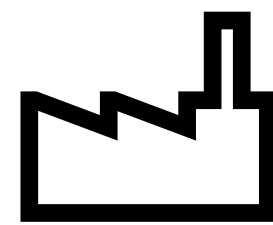


ANNUAL YIELD
KG PROTEIN
PER HECTARE

LAND USE FOR
SOLEIN IS 60 TIMES
MORE EFFICIENT THAN
FOR PLANTS AND 1 000
TIMES MORE EFFICIENT
THAN FOR BEEF
PRODUCTION.



GREENHOUSE GAS EMISSIONS

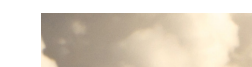


EMISSIONS
KG CO₂-EQ/
KG PROTEIN

SOLEIN POLLUTES
FIVE TIMES LESS THAN
PLANT PRODUCTION AND
100 TIMES LESS THAN
BEEF PRODUCTION.



BEEF
45 KG

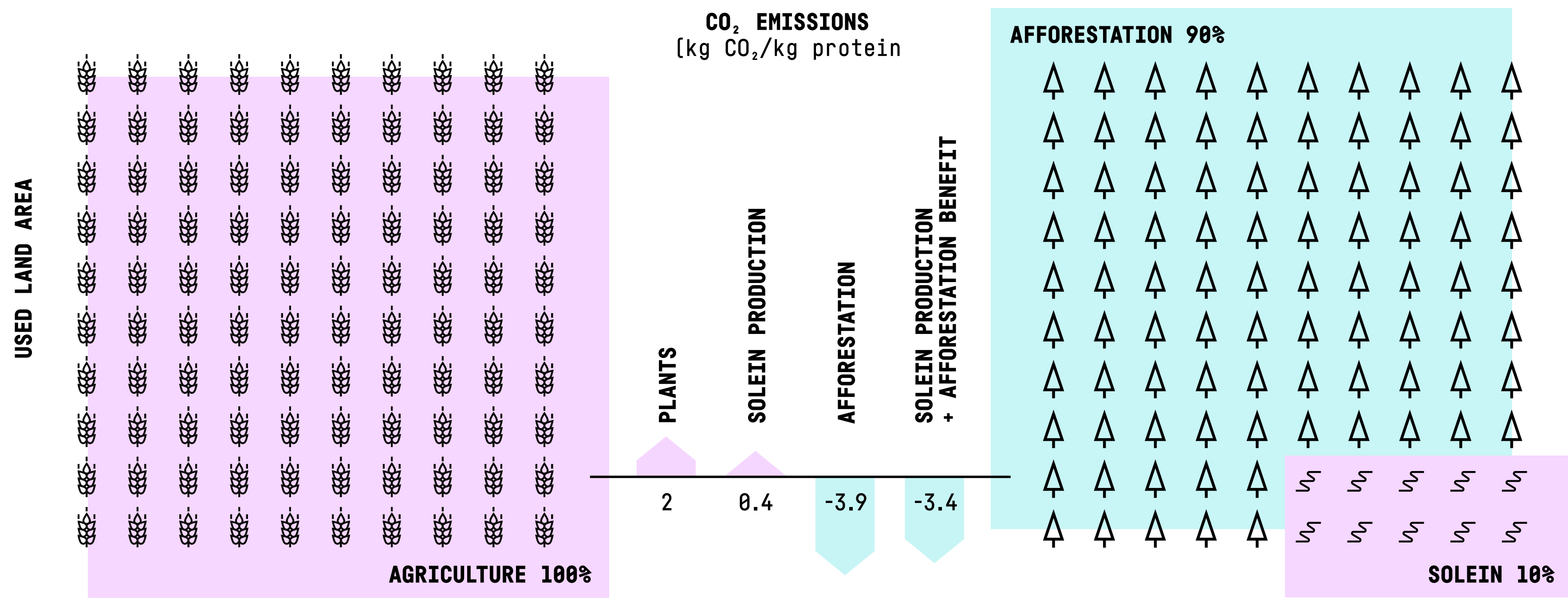


PLANTS
2 KG



SOLEIN
0.4 KG

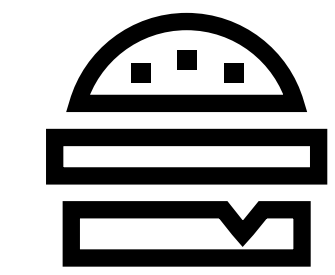
WHEN REPLACING ANIMAL OR PLANT BASED PROTEINS, SOLEIN IS CARBON NEGATIVE.



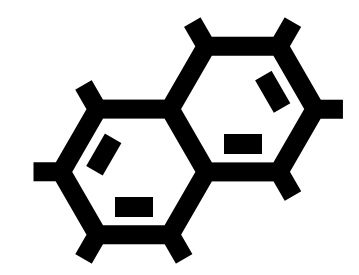
CREATING A PLATFORM FOR MULTIPLE USES



**NUTRITIOUS
FOOD INGREDIENT**



**PLANT-BASED
MEAT ALTERNATIVES**



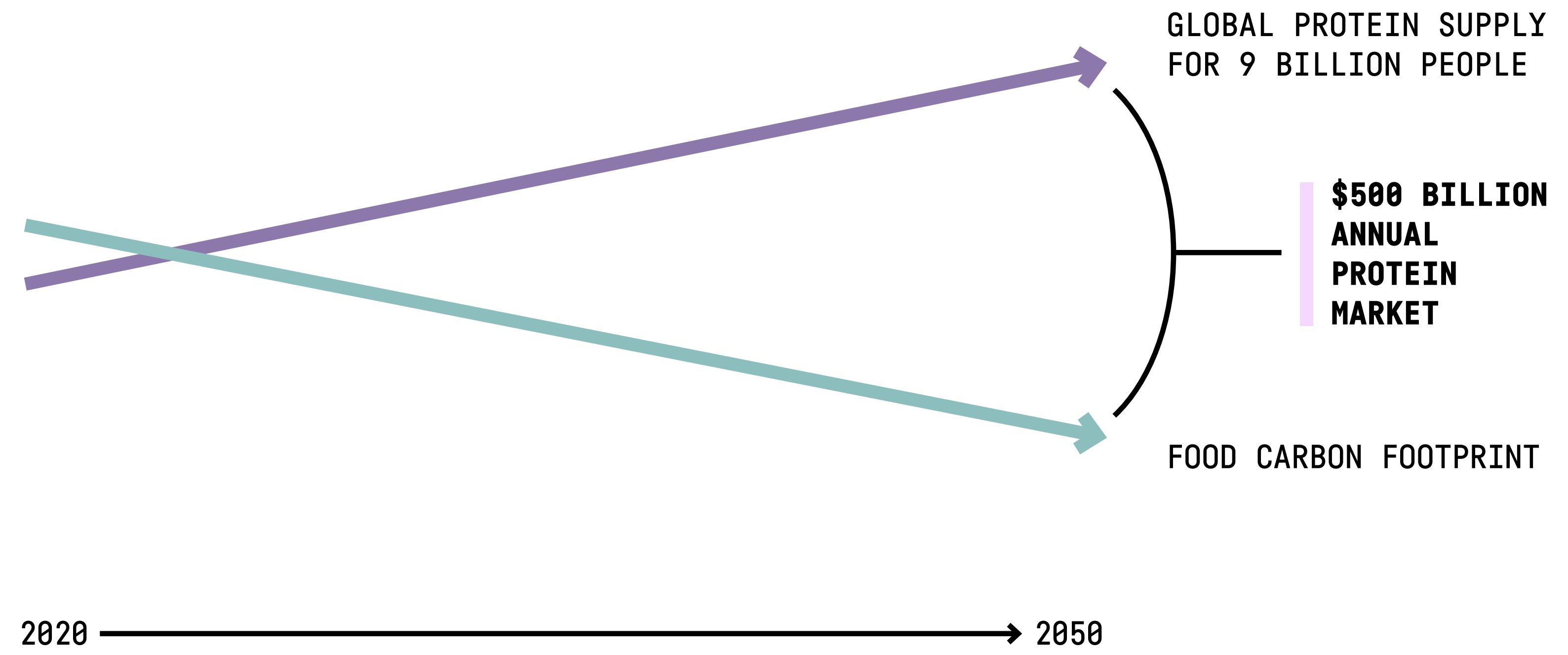
**CULTURED
MEAT**

IDEAL FOR EVERY MEAL, CONSUMER OR DIET



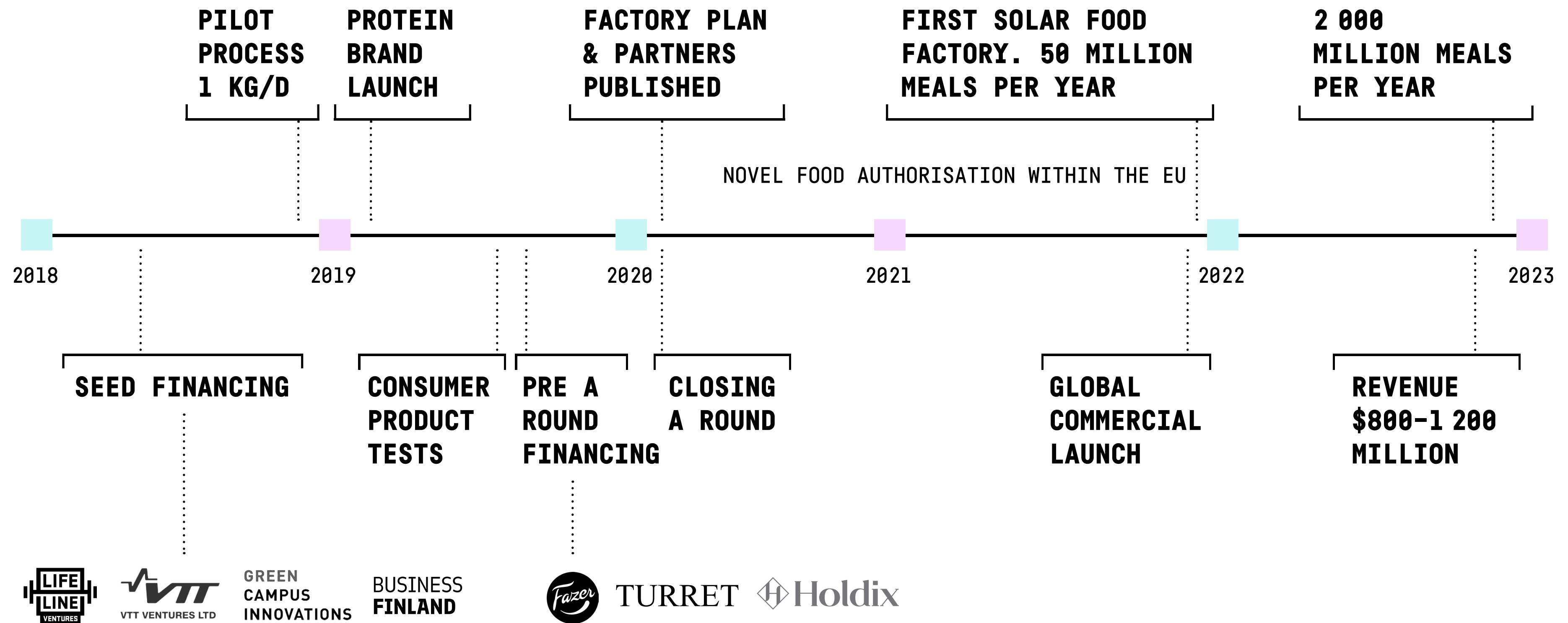


MARKET OPPORTUNITY





OUR ROADMAP



SOLAR FOODS

Liberating protein production.



solarfoods.fi



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info@solarfoods.fi



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