

Buildings have a significant environmental impact



THERE ARE TWO WAVES OF CHANGE COMING TO ADDRESS THESE EMISSIONS

Sustainability & Circular Economy

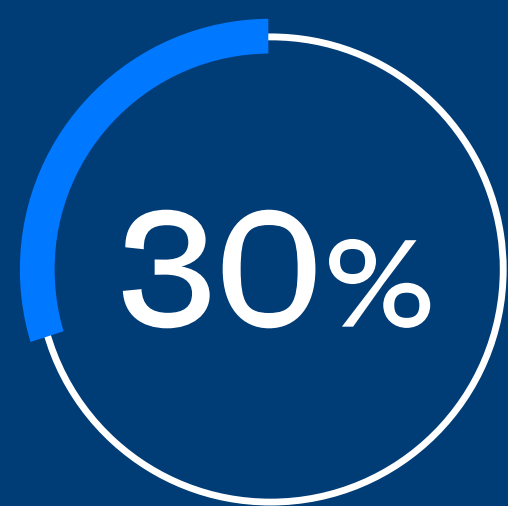
To limit the resources used and the waste created

Energy Efficiency & Renovation

To make all buildings energy efficient by focussing on renovation of existing buildings

More than 75% of the EU building stock is energy-inefficient

It is important to consider the **entire lifecycle** of a building



30% of a building's emissions come from the materials used to build it and at its end-of-life.



70% of a building's emissions come from the energy used to operate it.



RAW MATERIALS

CONSTRUCTION

MAINTENANCE AND USE

END-OF-LIFE

RE-USE

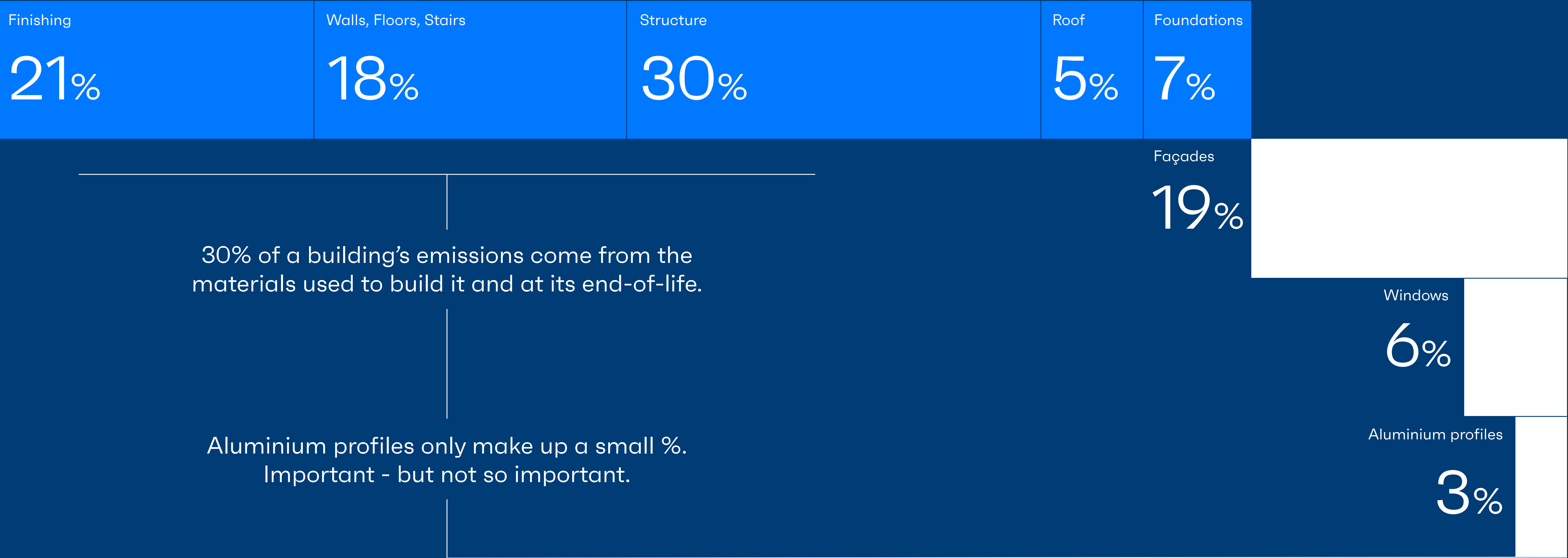
Embodied

Operational

To decarbonise a building, the right solution is always a trade-off between operational and embodied carbon.

● Embodied ● Operational

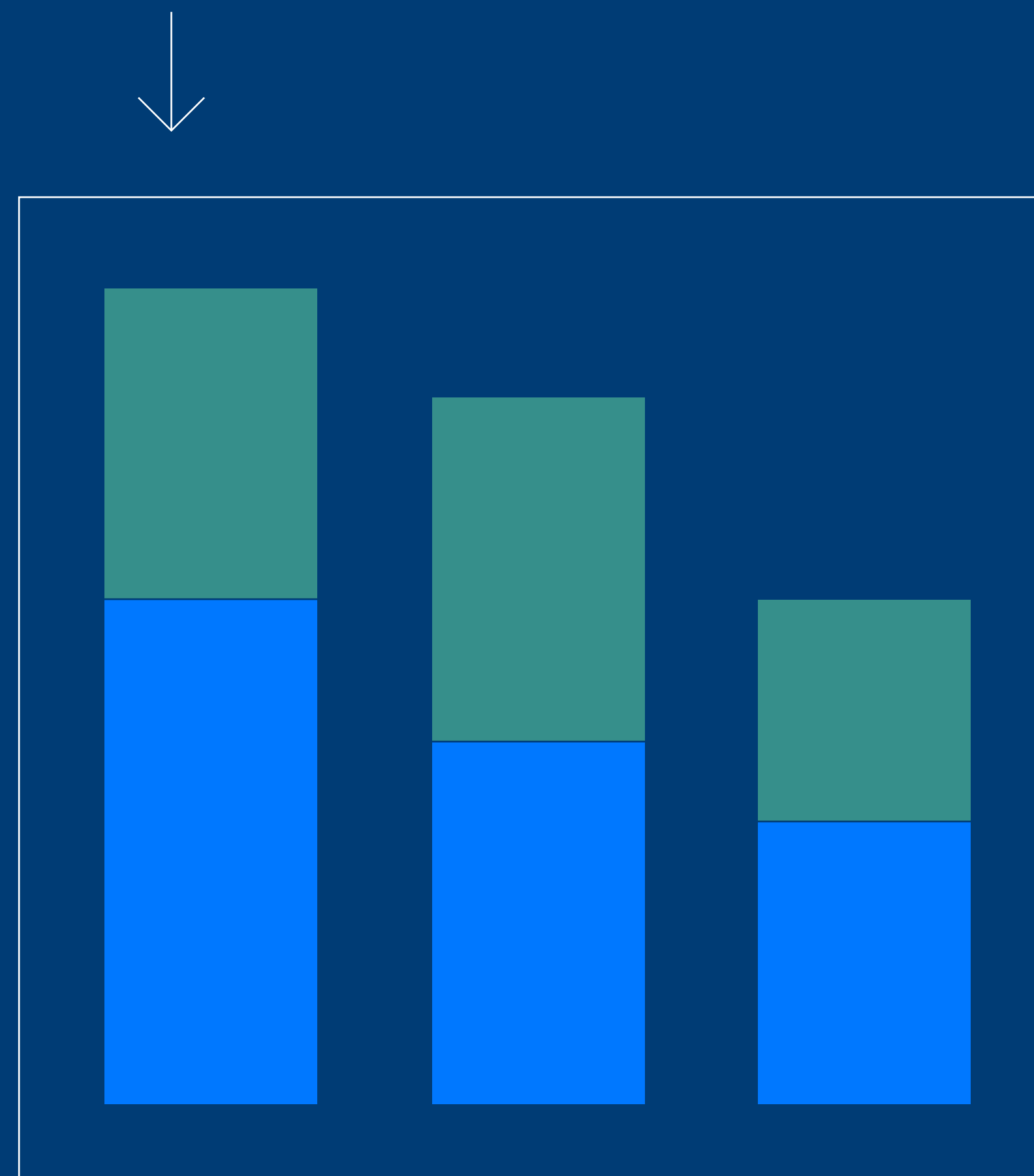
Reducing **embodied carbon** in a building's construction



The big **immediate** win is reducing operational carbon



Historically



New construction in Western Europe

● Embodied ● Operational



The biggest lever we can pull is to dramatically improve operational carbon - through better energy efficiency and renovation of older building stock.



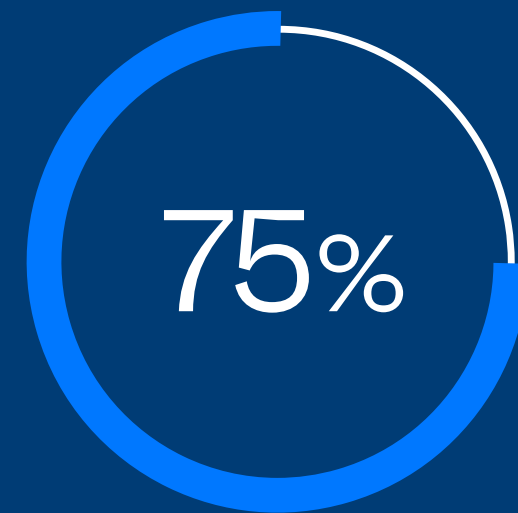
The impact of energy-efficient doors, windows and façades is critical to these improvements.



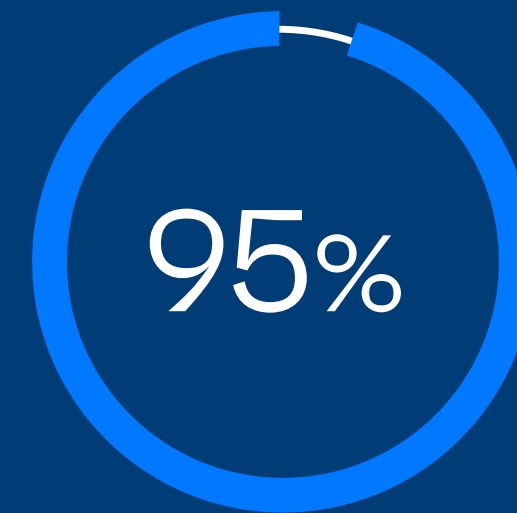
More than 75% of buildings in Europe are still energy-inefficient.



average useable
lifespan of aluminium



of all aluminium ever
made is still in use



of aluminium
gets recycled

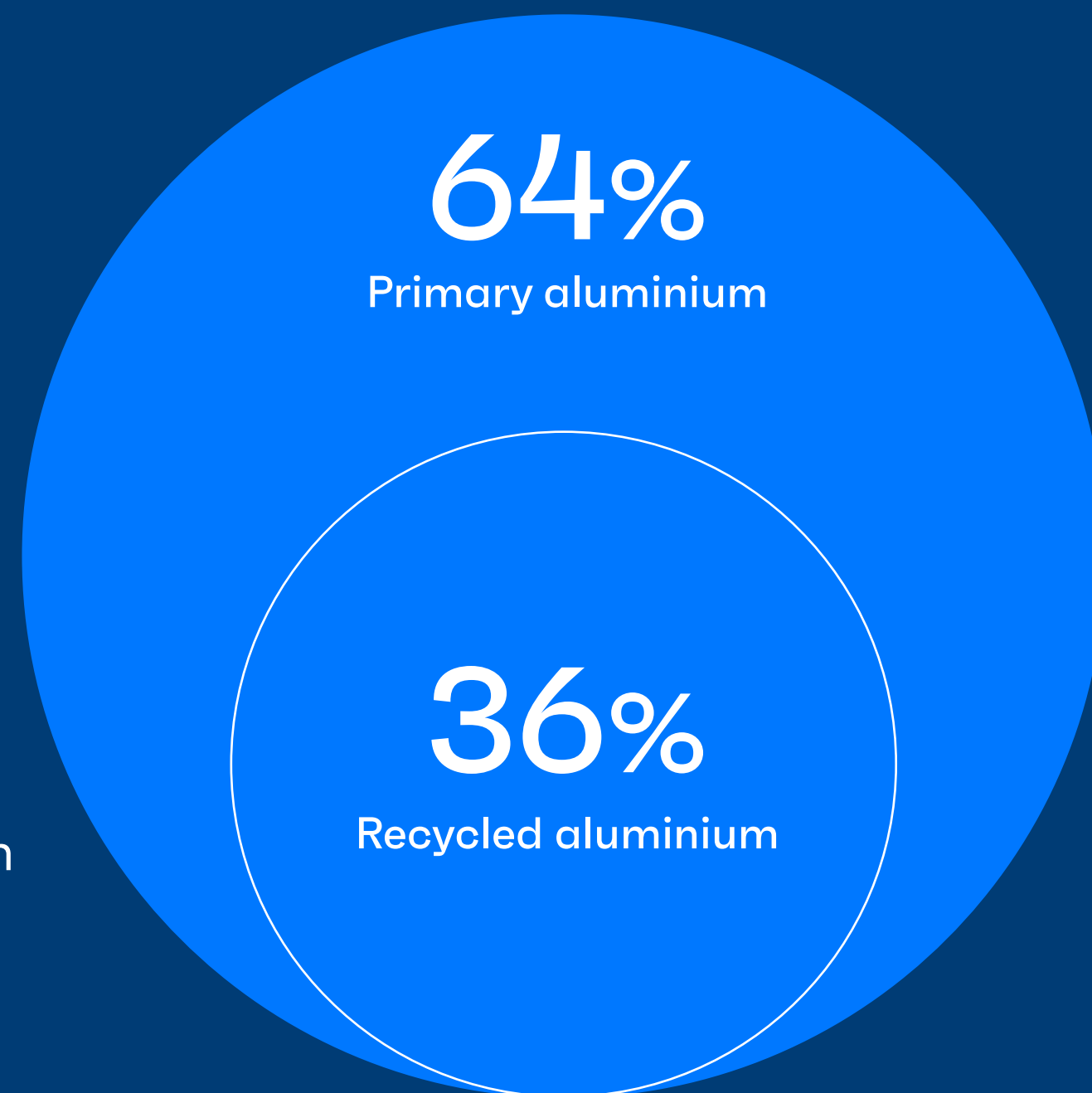
Aluminium is
an outstanding
material



Which means the in-flow supply
of end-of-life scrap is low - there
is less recycled material
available at any given time
because it is still in use.



Only 36% of demand can be
met by recycled aluminium -
there is not enough supply in EU.



The Optimal Blend:

Primary aluminium produced with
clean energy - combined with a
fair share of recycled content

Recycled aluminium

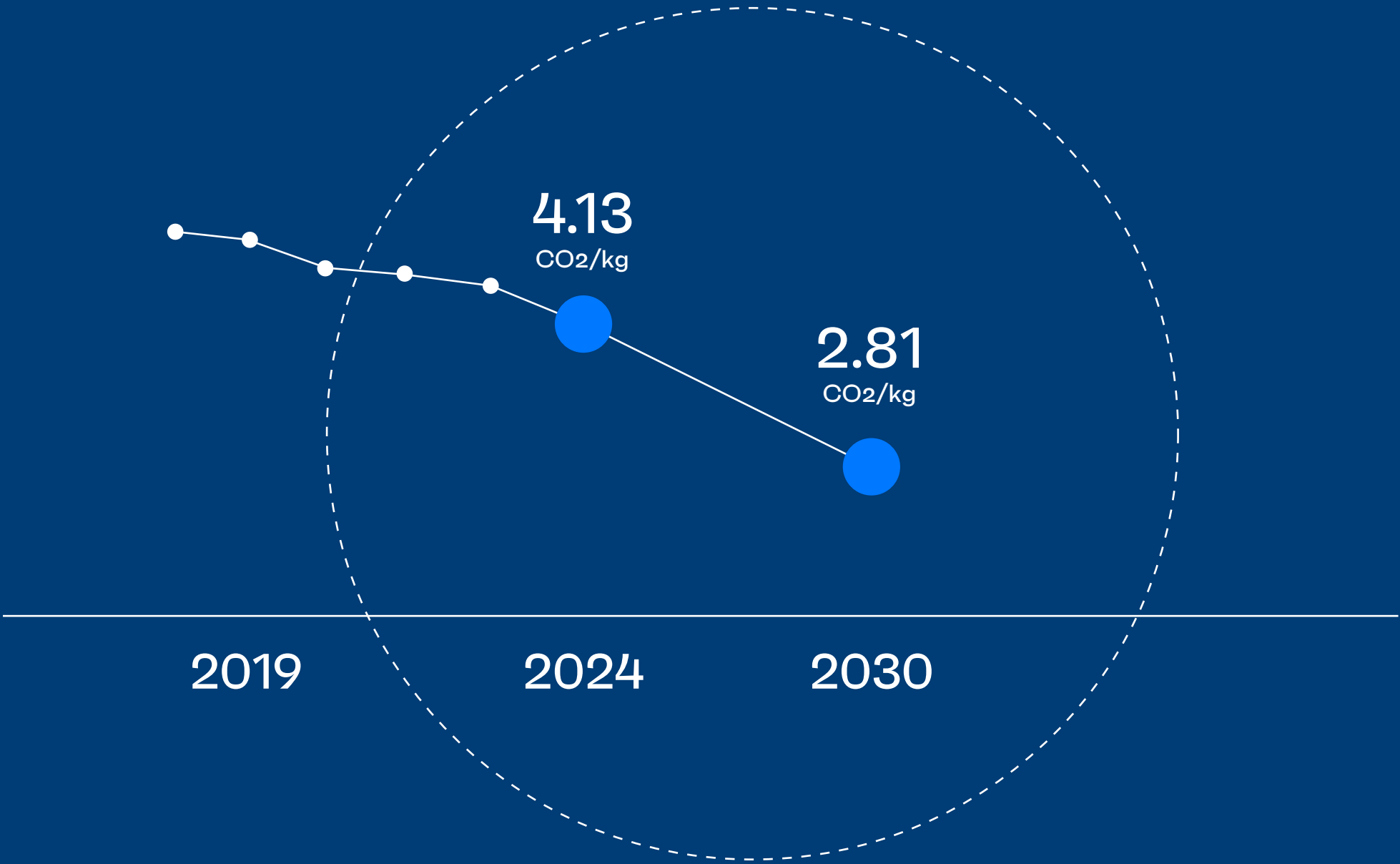
+

Primary low-carbon aluminium

=

Low-carbon aluminium

Low carbon: the optimal blend of primary aluminium produced with clean energy - combined with a fair share of recycled content



77%

of our aluminium today is low carbon

>90%

is the target we are striving for by 2030

