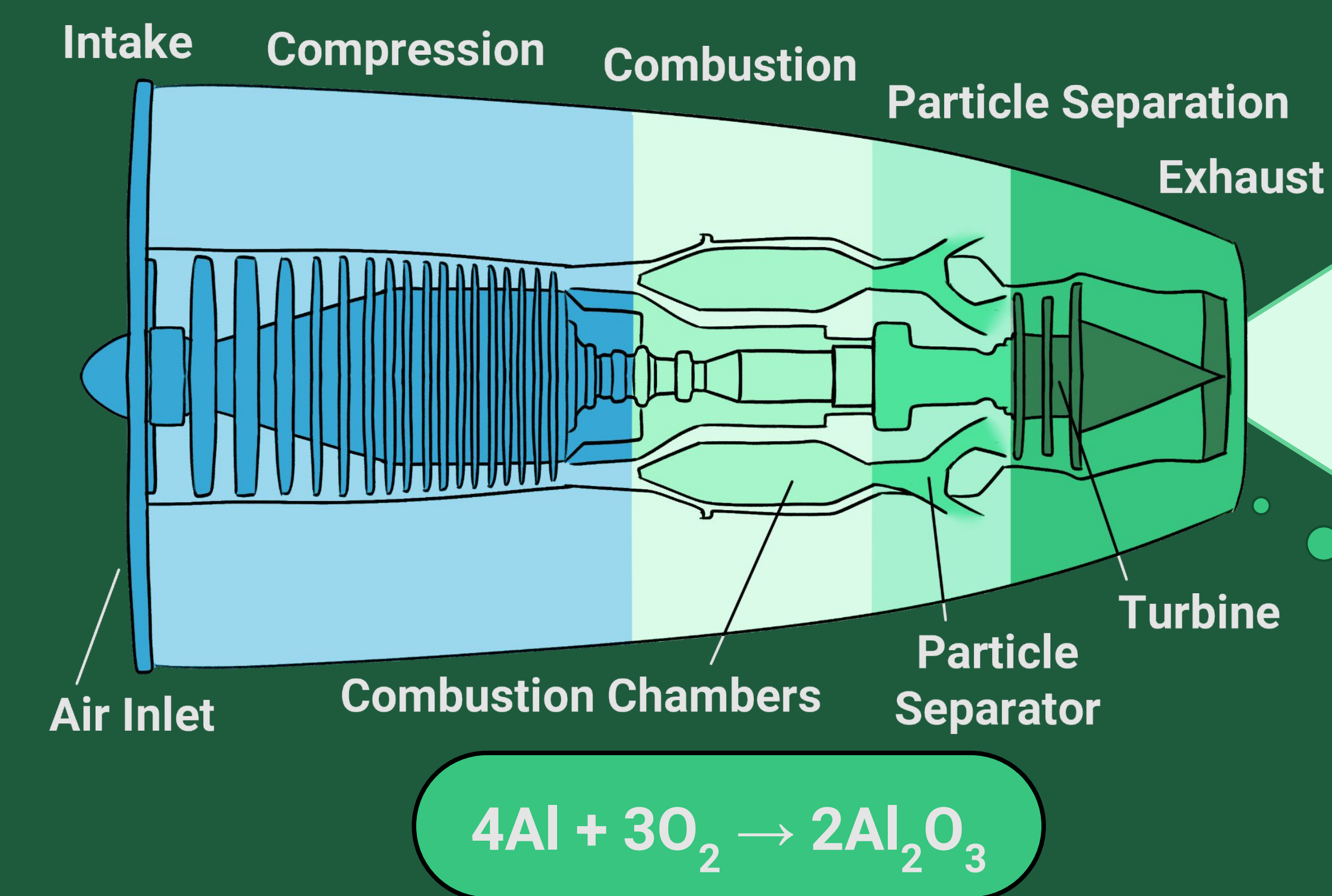


ALUMINUM POWDER COMBUSTION



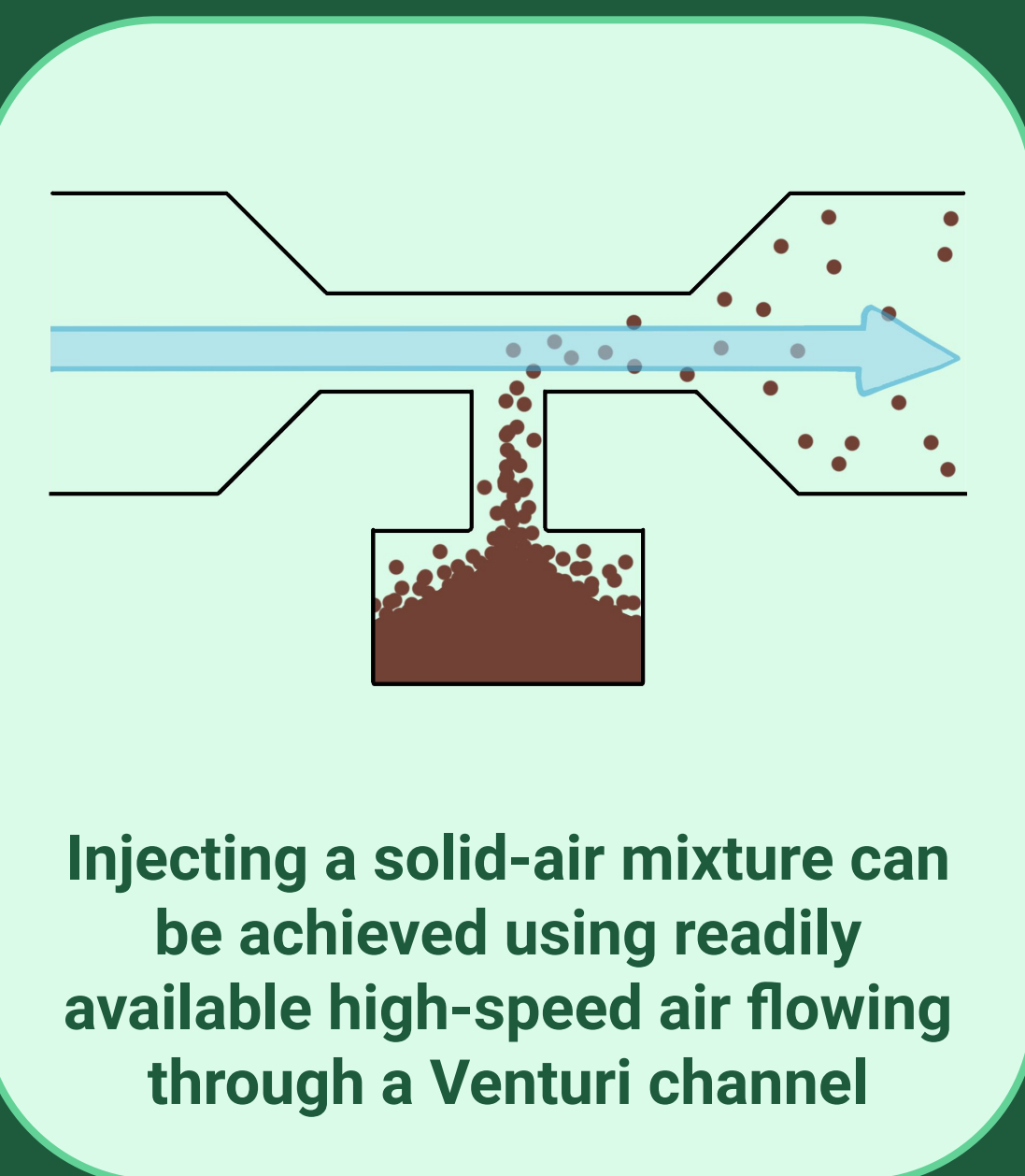
GOALS

- Maintain as much of current gas turbine engines as possible
- Keep necessary modifications to a minimum
- Provide a pathway to feasibility

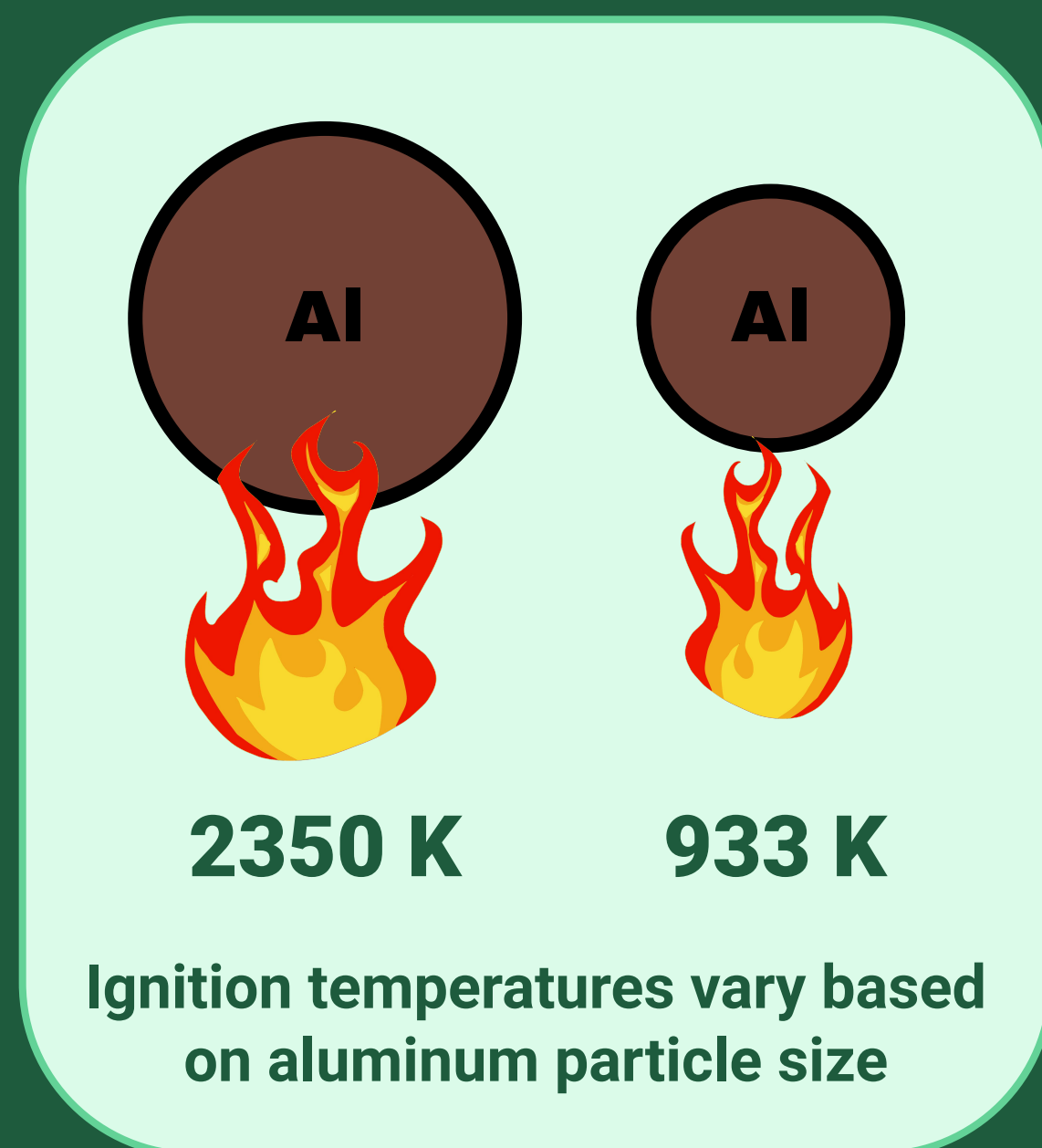
100% Combustion Emissions Reduction!



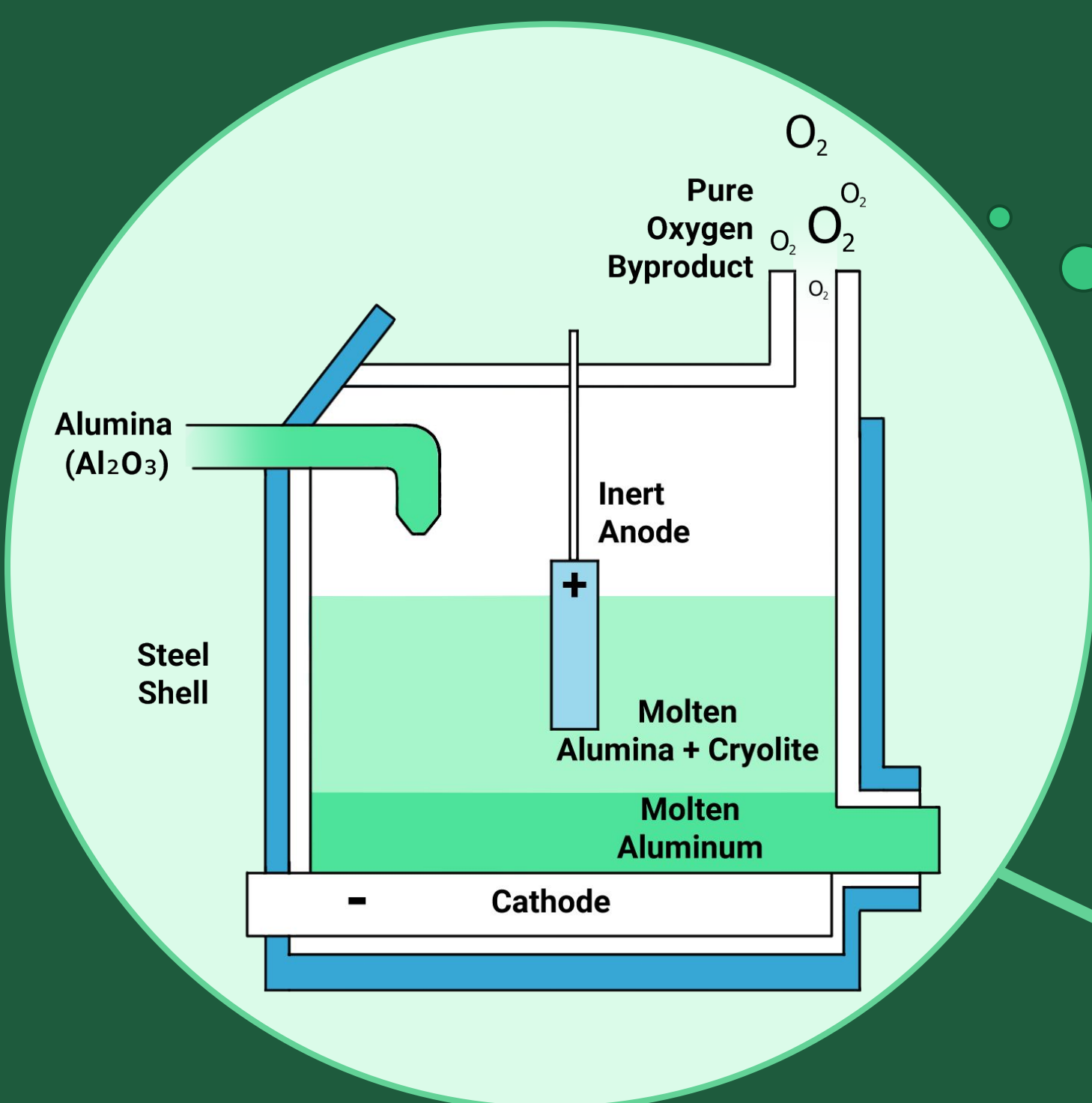
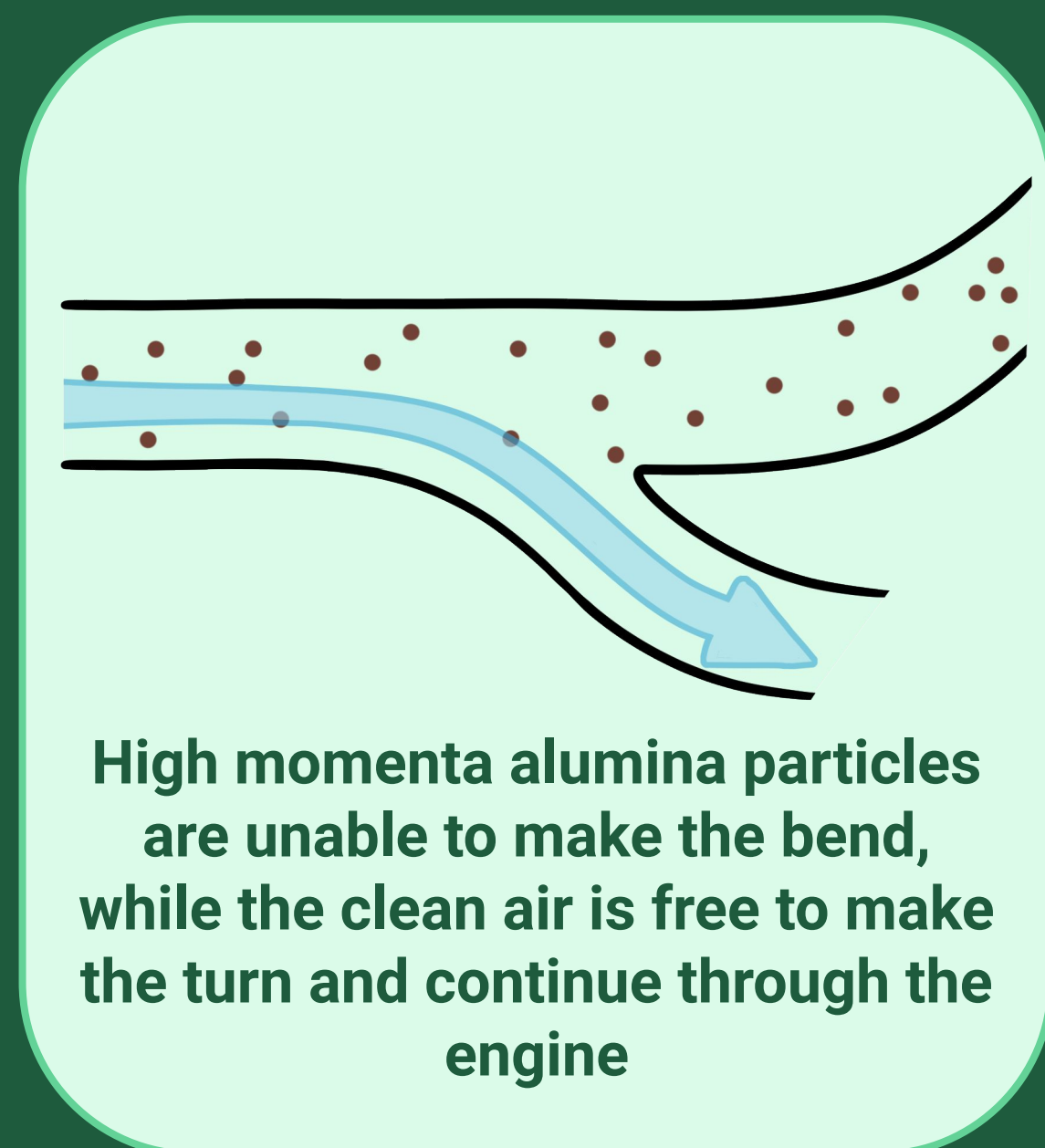
INJECT



IGNITE



EXHAUST



100% Smelting Emissions Reduction!

INERT ANODE HALL-HÉROULT

Industry leaders are currently retrofitting aluminum smelters to use an inert anode, which eliminates emissions of CO_2 , CF_4 , & C_2F_6

Now, O_2 is the only gas emitted



Jet A vs. Aluminum

Energy Density



+198%

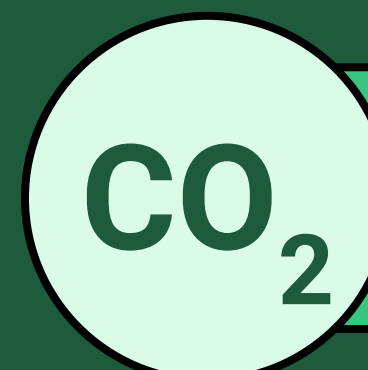
+11%



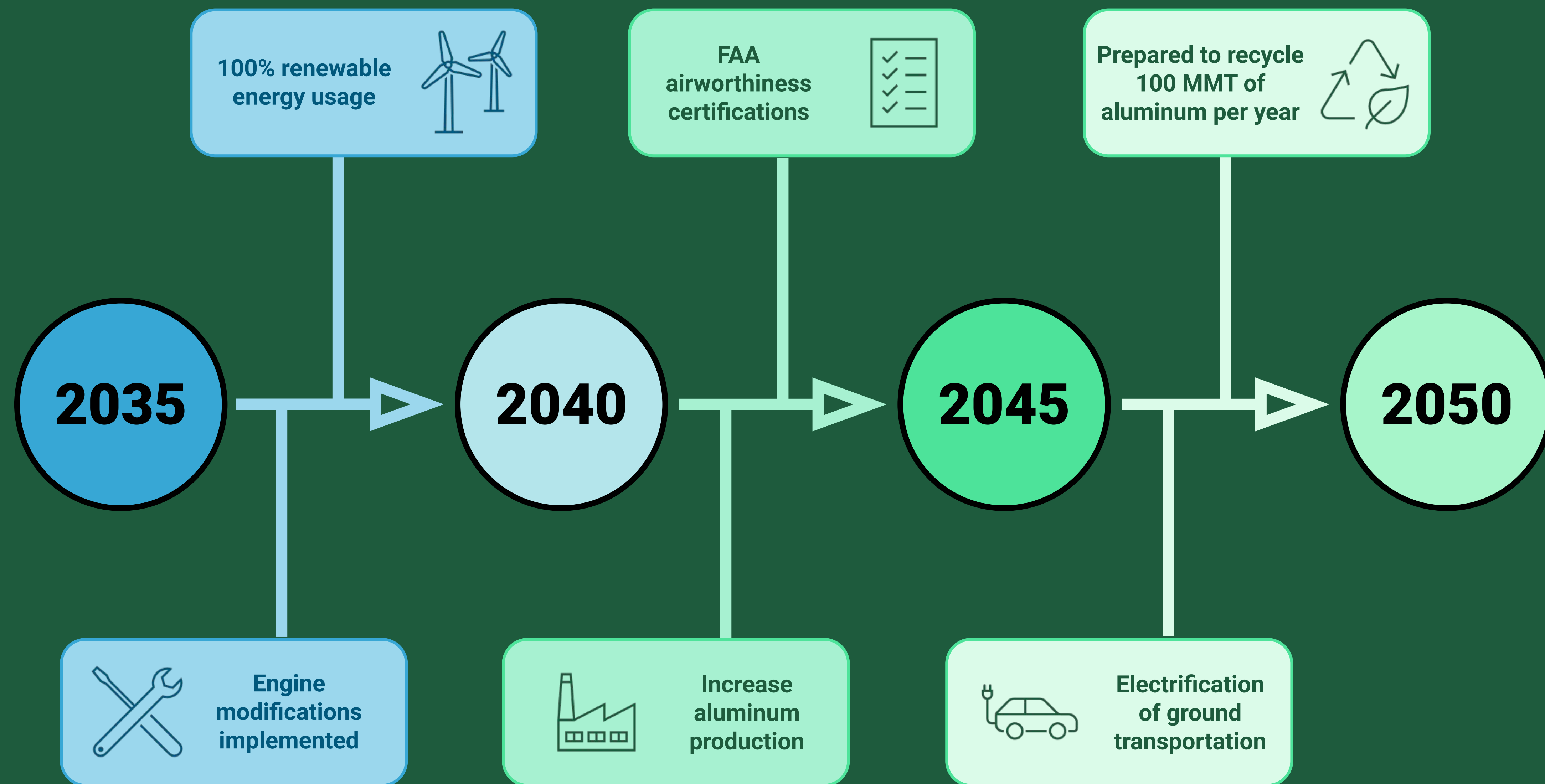
Specific Energy

96% Total Emissions Reduction!

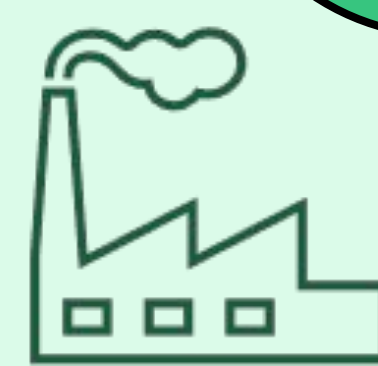
920 MMT/yr



42 MMT/yr



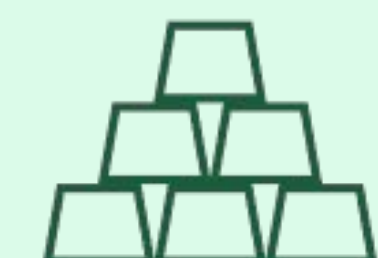
\$785B



Construction of new smelter facilities

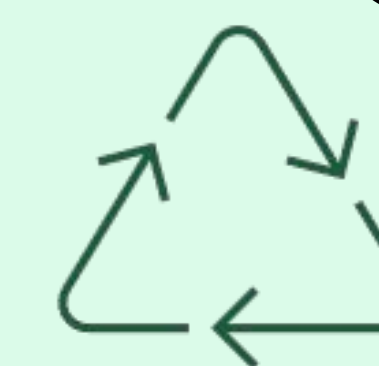


Retrofit commercial aircraft



Buying new aluminum

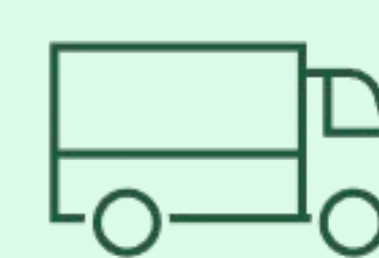
\$178B per year



Recycling captured alumina



Engine maintenance



Labor & transportation

103% Increase From Jet A

