Hoy design for sustainable aluminium



Industry partners





- criticalit
- processability
- performance



Understand

limiting / helpful alloying elements



Estimate

- tensile strength
- elongation
- yield strength



Rank

potential new alloys



Create 31 new alloys

- 15 high-pressure die casting
- 9 extrusion
- 7 stamping



mechanical behaviour



Use new alloys

- high-pressure die casting
- extrusion
- stamping



Test demo parts

- .
- processingstructure
- mechanical

BENEFITS ENVIRONMENT & SOCIETY



ASSESS

Reduced impacts: environment / CO₂ / cost





ALLOY DESIGN POSSIBLE

New methodology benefits academia



DESIGNED ALLOYS WORK

Benefits metals, recycling & EV industries















