



ARCHIMEDES



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Trusted Lifetime in Operation for a Circular Economy

In **ARCHIMEDES**, components, models, and methodologies to increase the efficiency and lifetime of the propulsion components, power components, and energy storage devices in automotive, aviation, and industry will be developed.

The **ARCHIMEDES** project draws inspiration and ambition to provide new, advanced technologies for energy transition, safety, and security.

WHY ARCHIMEDES

Archimedes of Syracuse (287 BC - 212 BC) was the greatest mathematician of his age. His contributions to geometry were revolutionary and his methods anticipated unparalleled progress beyond the State-of-the-Art. From this, the **ARCHIMEDES** project draws inspiration and ambition to advance the technologies for new technologies for energy transition, safety, and security.

VISION

Be the first in lifetime extension from 8,000 towards 120,000h and market readiness to accelerate the innovation cycles in energy efficiency and energy transition.

1. Deliver 15x lifetime (disruptive and extended long lifetime from State-of-the-Art 8000h in automotive towards 120.000h as required in future Electric Vehicles being part of the energy infrastructure).
2. Ensure quality in lifetime by prognostics and health management (disruptive perception change to monitor and manage quality and state of health in operation).
3. Half the time to market by novel design cycles and defined standards for new generations of consumer products that support the energy transition (fast introduction of technologies and products and disruptive qualification concepts for a highly extended lifetime to enable economy of scale).

PARTNERS



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