

E-Vehicle: the way to succeed
Examples of PPP concerning the E-Vehicle

Cluster Policy in the Context of E-Mobility

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AVL - ENGINEERING AND TESTING SERVICES: INTERNAL & EXTERNAL PROJECT NETWORKS



Passenger Cars



2-Wheelers



Racing



Construction



Agriculture



Commercial Vehicle



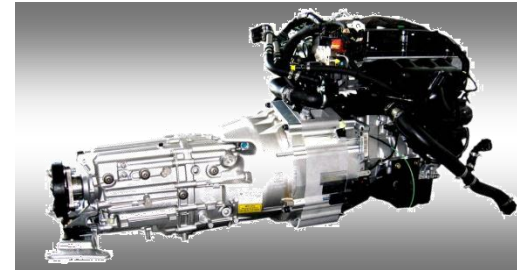
Locomotive



Marine



Power Plants



Powertrain Engineering

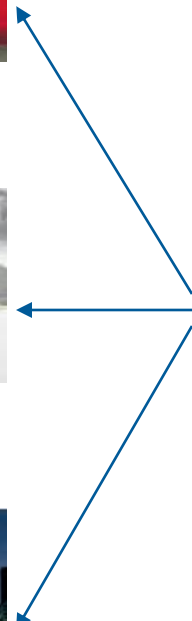


Simulation



Testing

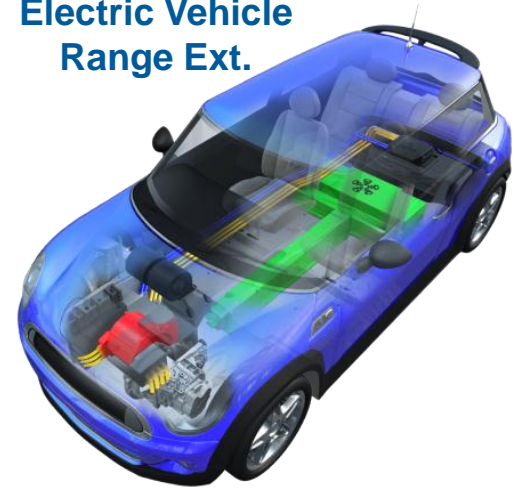
Development Platform



THE WAY TO ELECTRIFICATION CHALLENGE: COMMON DEVELOPMENT PLATFORM



Electric Vehicle
Range Ext.



Plug-in Hybrid



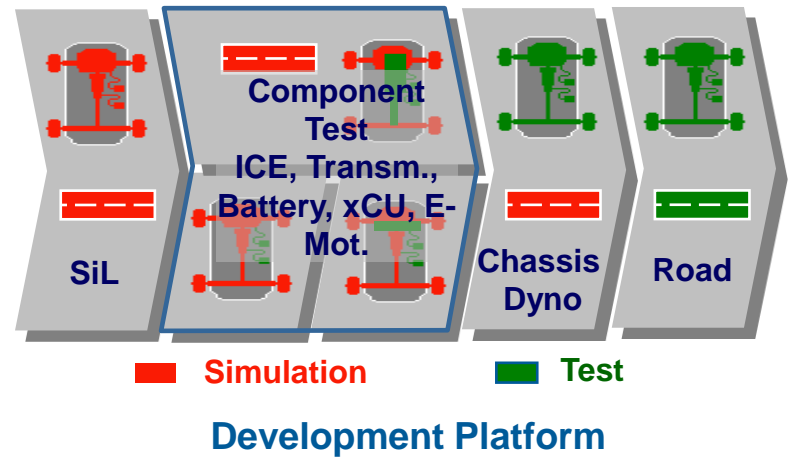
Automated
Transmission



Turbocharged
DI-Gasoline



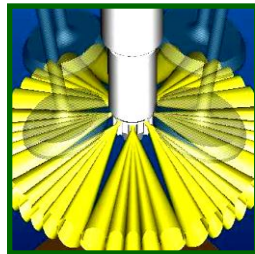
DI-Diesel



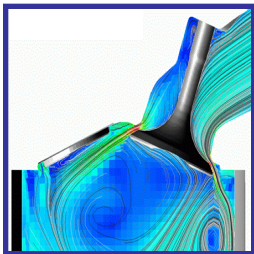
Testbed



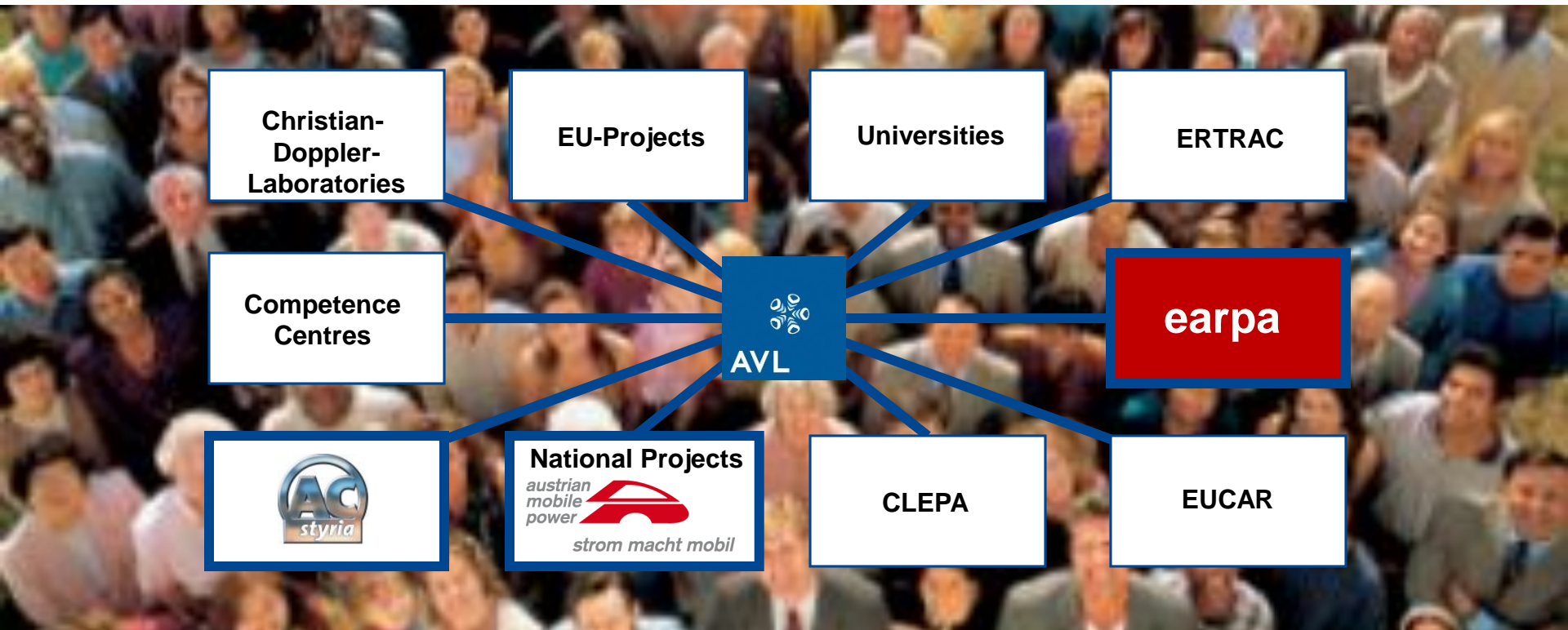
Instrumentation



Simulation



NATIONAL AND INTERNATIONAL COOPERATIONS



National Networks



European Networks

Common Positions and Views among Stackholders

Future of Hybrid and Electric Vehicles in Europe

In EARPA's view, the primary technological boundary conditions for further improving hybrid and electric powertrain systems are:

- Availability of safe and high-performing key electric components associated with industrial capabilities,
- Cost competitiveness to conventional powertrains,
- Environment and tools for competitive development time & costs,
- Compatibility with future CO2-neutral fuels and common modules with future alternative propulsion systems,
- Highly accurate range prediction for electric vehicles based on advanced navigation systems
- Education and training to develop or improve specific skills in EU (hybrid system control & design, system integration, power electronics,...) will be also required.





Holistic Approach

ERNEUERBARE STROMGEWINNUNG
aus Wasser, Wind- und Biomassekleinkraftwerken
sowie Solarenergie

PRIVATHAUSHALTE
Solar-Hausanlage, Fahrzeuge
laden Strom, speisen über-
schüssigen Strom zurück
in das Netz

austrian
mobile
power

STROMNETZ
Leistungsfähige, intelligente
Transport- und Verteilnetze

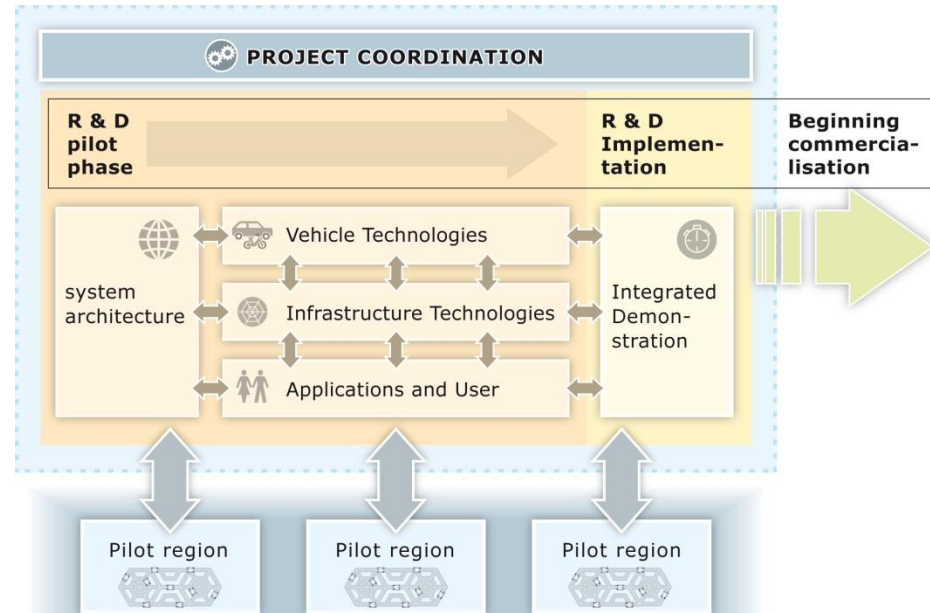
ELEKTRO-MOBILE REGION
mit E-Forschung & -Entwicklung,
E-Autoindustrie und verdichtetem
Netz von E-Ladestationen



Project overview – emporA & emporA2

The emporA projects aim to develop a **system solution for electric mobility** and to advance solution levels in all dimensions.

Structure of emporA project and interaction with pilot regions: The emporA projects organize development tasks into the three strands **vehicle technologies**, **infrastructure and applications**, building on a shared **system architecture**.



Budget & Funding

emporA (January 2010- December 2012)			emporA 2 (April 2011- March 2014)		
Partners (No)	Budget (EUR)	Funding (EUR)*	Partners (No)	Budget (EUR)	Funding (EUR)*
14	21 Mio	8.8 Mio	15	5 Mio	2.2 Mio



* emporA & emporA 2 are supported with funds from the Climate and Energy Fund and implemented in line with the "ELECTROMOBILITY'S TECHNICAL BEACONS" programme.

AUTOMOTIVE POWER STYRIA

ACstyria – Industry Network with 200 Partners

Cluster as catalyst for

- Accelerated growth of regional industry
- Strengthening of competitiveness

