SRIPACS+

Strategic Research and Innovation Partnership in Mobility

5th Conference on Transport and Research in the Danube Region

BATTERIES BETWEEN TODAY AND TOMORROW

Tanja Mohorič, director November 2018 Mobility is one of the priority domains of Slovene Strategy of Smart Specialization and one of the core European domains.



CONNECTING KNOWLEDGE AND INNOVATION FOR 15 YEARS

ACS, Slovene automotive cluster in partnership with Association for transport at Chamber of Commerce

100

members

17 %

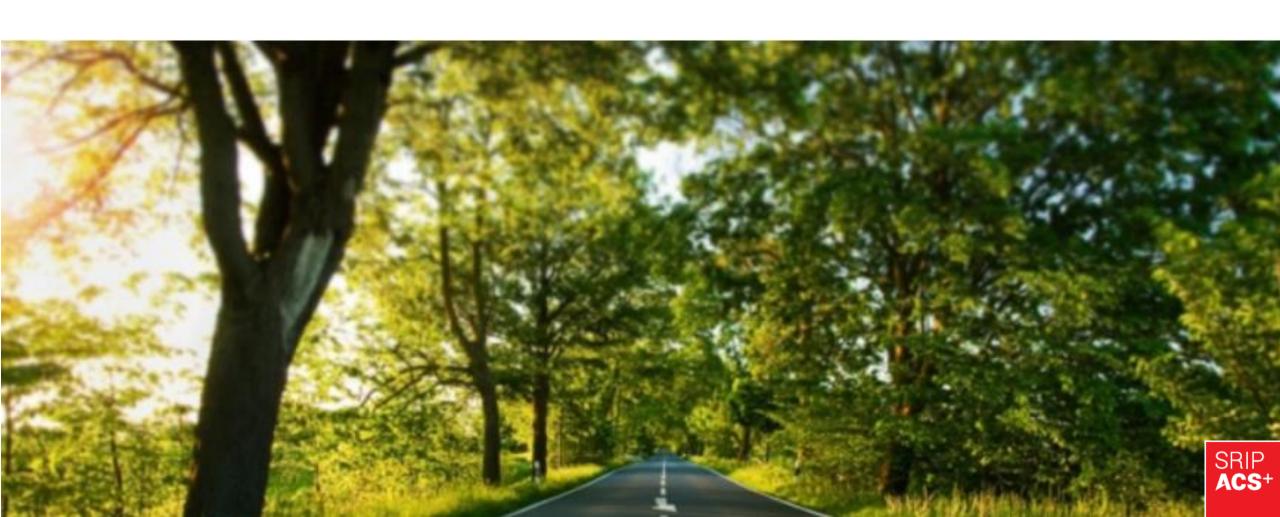
of slovene GDP

20%

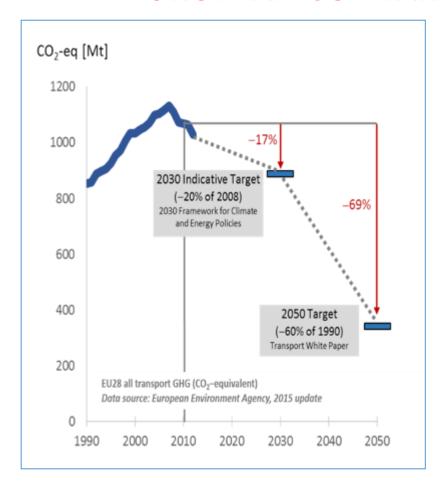
of slovene export

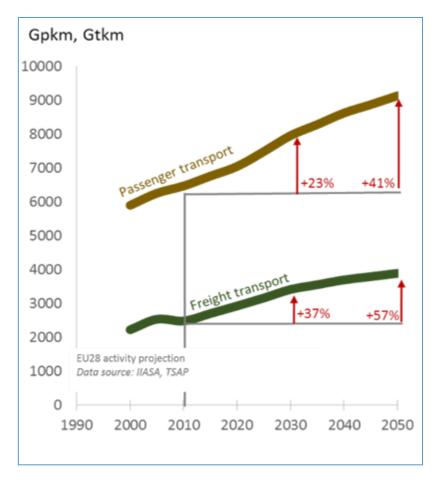


GREEN MOBILITY IS IN THE CORE OF OUR FUTURE ACTIVITIES



EUROPEAN CO2 TARGETS FOR TRANSPORT





For **Road transport** this means a **reduction** from 700 MtCO₂ to less than 280 MtCO₂

There is a need to significantly reduce transport CO_2 whilst demand is projected to increase To reach the overall European CO_2 targets for transport, a system approach is needed



SHIFT IS NEEDED



IT IS NOT ALL ABOUT TECHNOLOGY



BETTER INFRASTRU-CTURE



IMPROVED LOGISTICS



FLEXIBLE AND SHARED MOBILITY SERVICES



DECARBONISED ENERGY / FUELS



INFRASTRU-CTURE FOR CONNECTED AND AUTOMATED VEHICLES



PUBLIC TRANSPORT AND INTERMODALITY

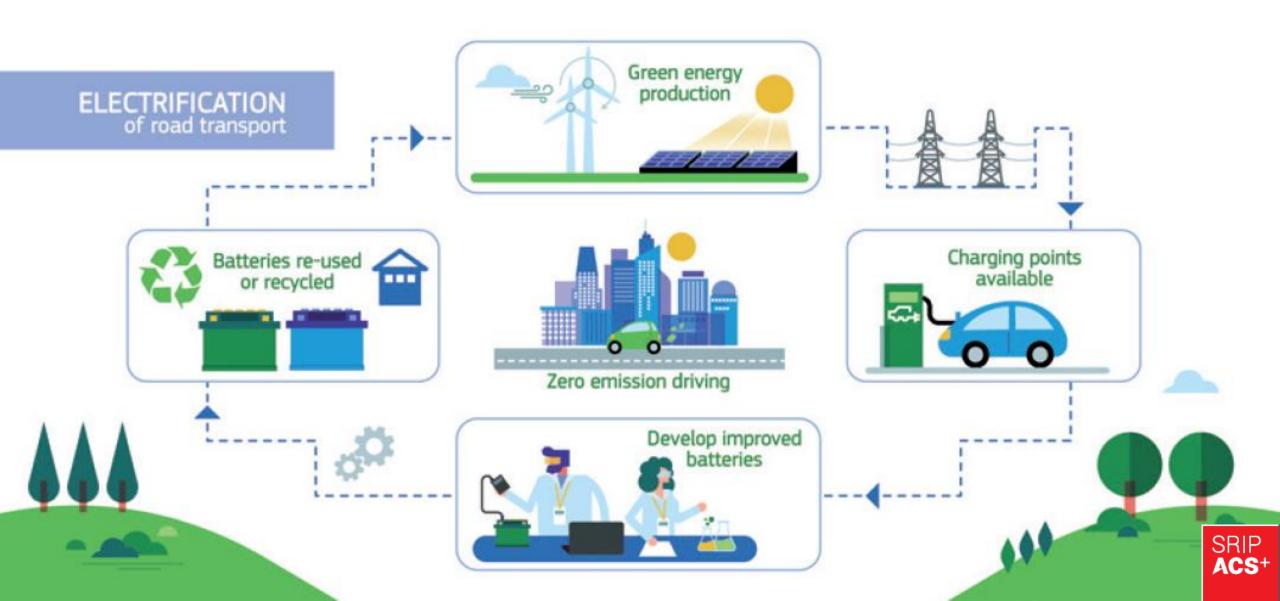


INTELLIGENT TRAFFIC MANAGEMENT



EFFICIENT VEHICLES







100 NEW MODELS OF EV BY 2025

Manufacturing on multiple continents

— complicated shipping requirements

Lithium and other rare metals — where do they come from and at what cost?

Battery recycling — is everybody ready for it?

Goodbye easy fixes and jump-starts

No adventures into remote areas for you!

Renewable electricity and hydrogen, please?



The problem today is that people do not like waiting, and it takes awhile to charge an electric car, not to mention planning trips. People want electric cars today, and they want them to be at least as great as conventional vehicles.

The **resale value** of such an automobile could become a significant burden for those that own them, if anyone will want to buy a 10-year-old electric vehicle. Imagine buying a "Palm Treo" phone from 2006 (Go ahead, Google that), which was considered a "smartphone" at the time.





FROM up to 1000 km in 3 min

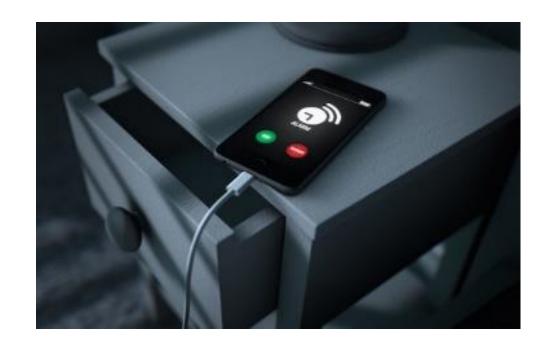


TO max 400 km in 8 hours





 $FROM_{\text{fast stops}}$



TO long charging





FROM distributed stations



TO "every opportunity" charging



HOLISTIC CONSIDERATION OF ECOLOGICAL IMPACT













PRODUCTION

FUEL SUPPLY AND TAILPIPE EMISSIONS

ELECTRICITY SUPPLY

END OF LIFE



SRIP ACS+

Strategic Research and Innovation Partnership

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