

ELECTRIC MOBILITY AS CONTRIBUTION TO SUSTAINABLE TRANSPORT

Workshop: Sustainable Energy in Transport and Public Sectors in South-East Europe, Vienna, 14 November 2016

Robin Krutak

klimaaktivmobil.at bmlfuw.gv.at



E-MOBILITY STRATEGIES





Austrian Strategy on Electric Mobility, 2012

Vienna, 2015-2025



Province of Vorarlberg, 2015-2020



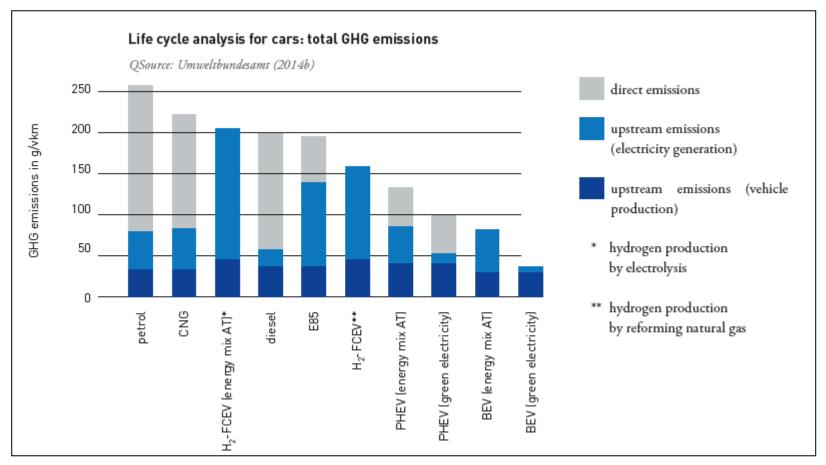
Province of Lower Austria, 2014-2020





LIFE CYCLE ANALYSIS

Up to 80% CO2 reduction with e-cars using energy from renewable sources!







FRAMEWORK FOR ELECTRIC VEHICLES

- no tax depending on motor vehicles fuel consumption
- no annual motor related insurance tax
- no value added tax for companies and tax advantages for employees
- subsidies for vehicles and charging infrastructure for companies and municipalities
- free parking in some areas





7 MODEL REGIONS





- Vorarlberg (VLOTTE, since 2008)
- Salzburg (ElectroDrive Salzburg, since 2009)
- Vienna (e-mobility on demand, since 2010)
- Graz (e-mobility Graz, since 2010)
- Lower Austria (e-pendler in niederösterreich, since 2011)

Modellregion ElectroDrive Salzburg

- Carinthia (E-LOG Klagenfurt, since 2011)
- Vienna (E-Mobility Post, since 2011)









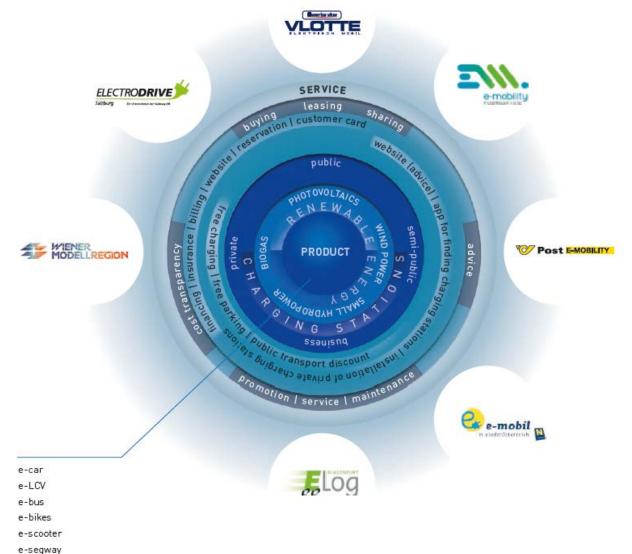
DIFFERENT SCOPES IN THE MODEL REGIONS

e-taxi

e-train







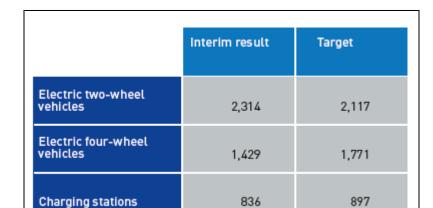




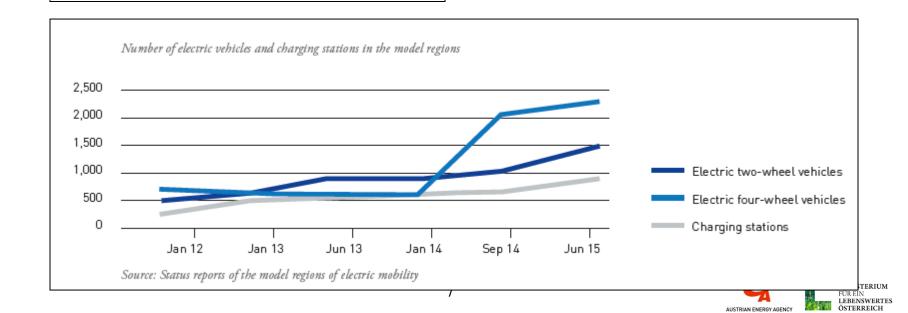


RESULTS FROM THE MODEL REGIONS



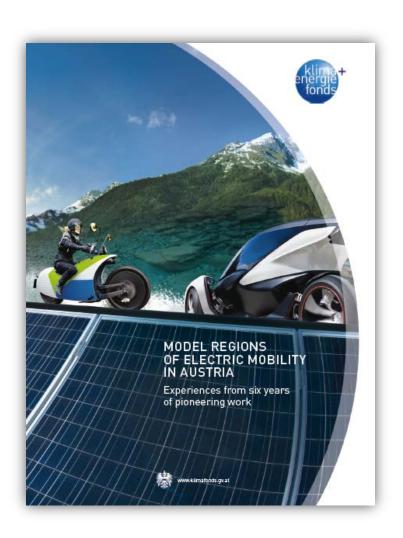








REPORT AVAILABLE!



MODEL REGIONS OF ELECTRIC MOBILITY IN AUSTRIA

Experiences from six years of pioneering work

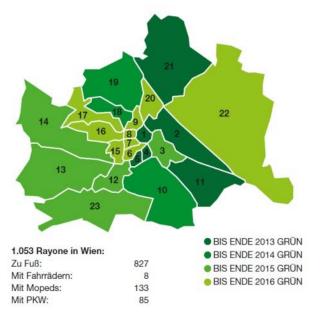
www.e-connected.at





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AUSTRIAN POST



E-Mobility program (2012-2016):

- 300 e-cars, 300 e-scooters, 500 pedelecs
- by the end of 2016 all letters in Vienna will be delivered without using any combustion engine!
- all energy for electric vehicles is provided from renewable sources!











ELECTRIC BUSES IN VIENNA

- two electric bus lines (2A, 3A) in the city center of Vienna (since 2013)
- the buses use the tram network's power lines for charging via a pantograph for 10 to 15 minutes at the end of the line
- overnight, the batteries are charged slowly at the bus depot



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ELECTRIC CAR SHARING





- electric car sharing service "EMIL" in Salzburg
- The annual average use of EMIL for all stations is 16.7 percent. The best locations have up to 45 percent use.
- The users are mostly aged between 25 and 55 years and predominantly male.
- it takes a certain time at least a year for users to start planning their mobility around a new service station
- www.fahre-emil.at







E-MOBILITY IN DRIVING SCHOOLS



- test riding of electric vehicles is crucial to convince people
- 90,000 learner drivers every year in Austria
- target: all learner drivers experience an electric vehicle during their driving school education
- information about the pilot project: www.pilot-emobility.at







CERTIFICATE FOR DRIVING SCHOOLS







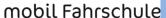
















roadstars

So findest du zum Übungsparkplatz und zur Fahrzeugkunde:

Fahre vom Jakominiplatz mit dem GVB Bus Linie 31, 32 oder 33 zur Haltestelle Don Bosco. Gehe von der Haltestelle ein kurzes Stück Richtung Innenstadt zurück und bei der ersten Ampel links in die Wetzelsdorferstrasse

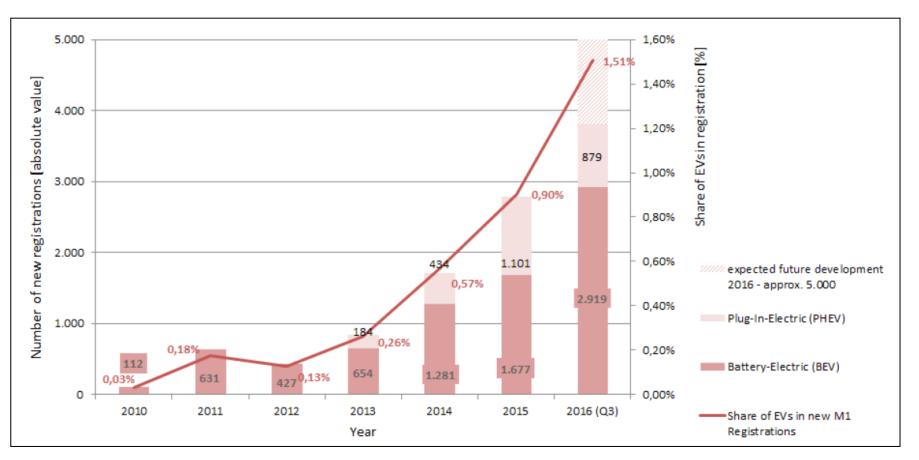
Die Firma Denzel erreichst Du cirka nach 5 Minuten - genaue Adresse des Übungsgeländes - BMW Denzel Wetzelsdorferstrasse 35







NEW ELECTRIC VEHICLES REGISTRATIONS IN AUSTRIA



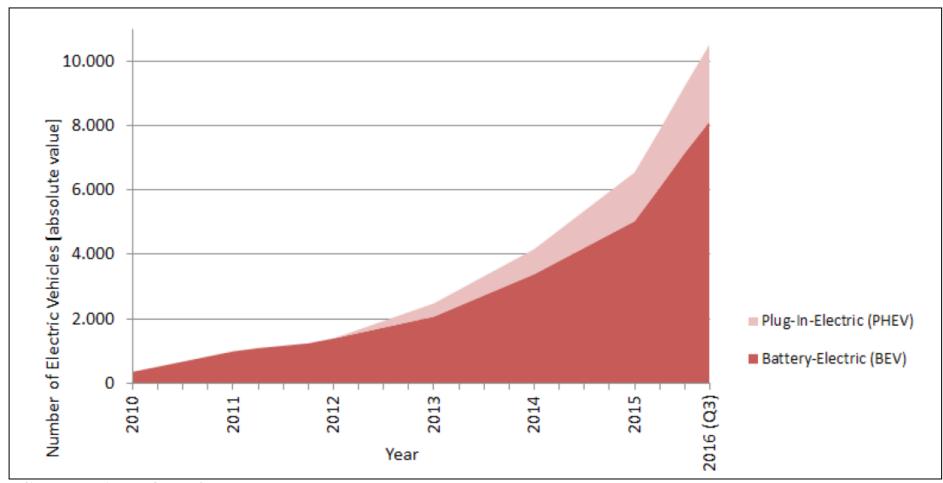
Source: Austriatech







ELECTRIC VEHICLES POPULATION IN AUSTRIA



Source: Austriatech

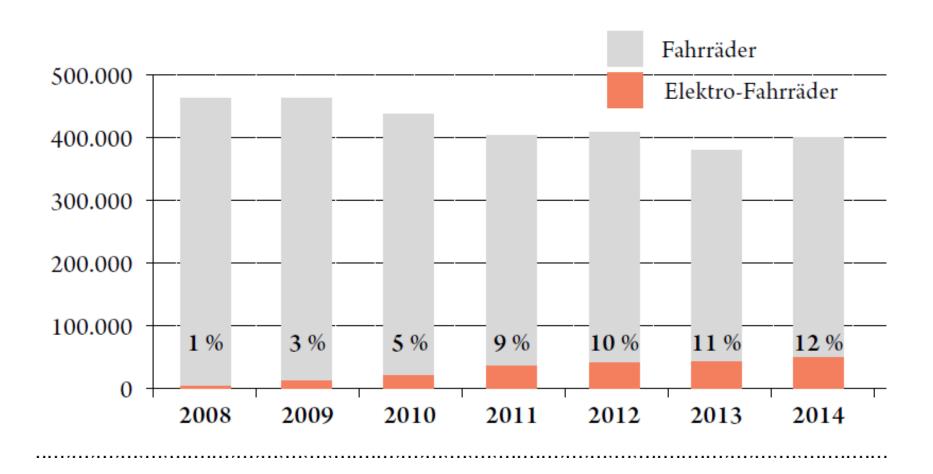






BOOM OF ELECTRIC BICYCLES SALES IN AUSTRIA









BEST PRACTICE BIODIESEL





- Austrian cargo forwarding company
- 220 trucks from Scania with biodiesel engines
- trucks fulfill pollutant limit standard Euro 6 and are approved for operation with 100 percent biodiesel
- "With a total mileage of 150,000 kilometers per year, the cost reduction per truck amounts up to 4,000 euros"









BEST PRACTICE BIO-CNG

- Albus: Austrian bus company
- use Bio-CNG made from field grass
- 37 Bio-CNG buses
- annual CO2 reduction of 2.400 tons



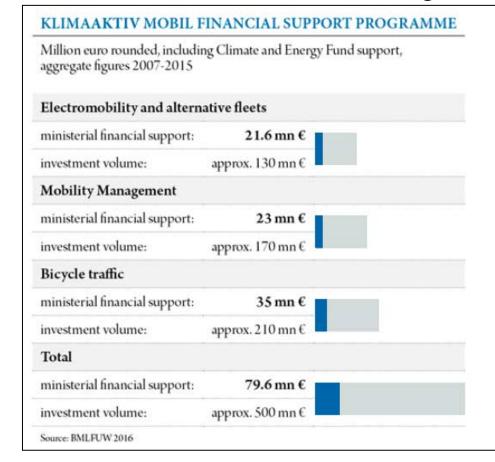


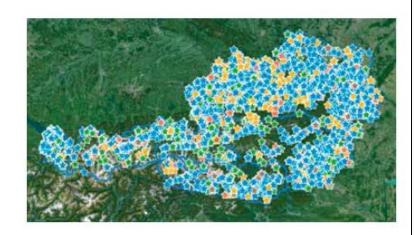


KLIMAAKTIV MOBIL



- promotes the transition to green mobility and provides a range of attractive services supporting CO2-reducing mobility projects.
- is an initiative of the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW)





Visit the klima**aktiv** project partners in Austria under <u>www.klimaaktivmobil.at/maps</u>



KLIMAAKTIV MOBIL

→ 6,600 projects reduce CO2 emissions in Austria by 610,000 tonnes/year!

years 2005-2015, aggregate figures		tonnes CO ₂ /year, aggregate figures	
years	Number of klima aktiv mobil projects, rounded	years	CO ₂ -reduction, rounded
2005	20	2005	8,000
2007	250	2007	140,000
2009	1,000	2009	330,000
2011	2,300	2011	470,000
2013	4,900	2013	570,000
2015	6,600	2015	610,00



THANK YOU FOR YOUR ATTENTION!

klima**aktiv** ist die Klimaschutzinitiative des Bundesministeriums für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft. Seit 2004 deckt klima**aktiv** mit den Themenschwerpunkten "Bauen und Sanieren", "Energiesparen", "Erneuerbare Energie" und "Mobilität" alle zentralen Technologiebereiche einer zukunftsfähigen Energienutzung ab. klima**aktiv** leistet mit der Entwicklung von Qualitätsstandards, der aktiven Beratung und Schulung, sowie breit gestreuter Informationsarbeit einen wichtigen Beitrag zum Klimaschutz. klima**aktiv** dient dabei als Plattform für Initiativen von Unternehmen, Ländern und Gemeinden, Organisationen und Privatpersonen.



Mag. Robin Krutak Austrian Energy Agency robin.krutak@energyagency.at +43 (0)1 586 15 24 - 175

klimaaktivmobil.at bmlfuw.gv.at

