



# “the RekkEvidde”

Assessing Range and Performance  
of Electric Vehicles  
in Nordic Driving Conditions



# “the RekkEVidde” Objectives

- Produce realistic performance figures for EVs attributed to Nordic driving and weather conditions
- Agree what kind of additional testing is done for EV's apart from the regulatory test (ECER No. 101)



Create market acceptance for EV's





# Consortium

Coordination



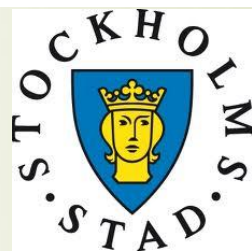
Laboratory testing



Field testing



Test Site Sweden





# Project content

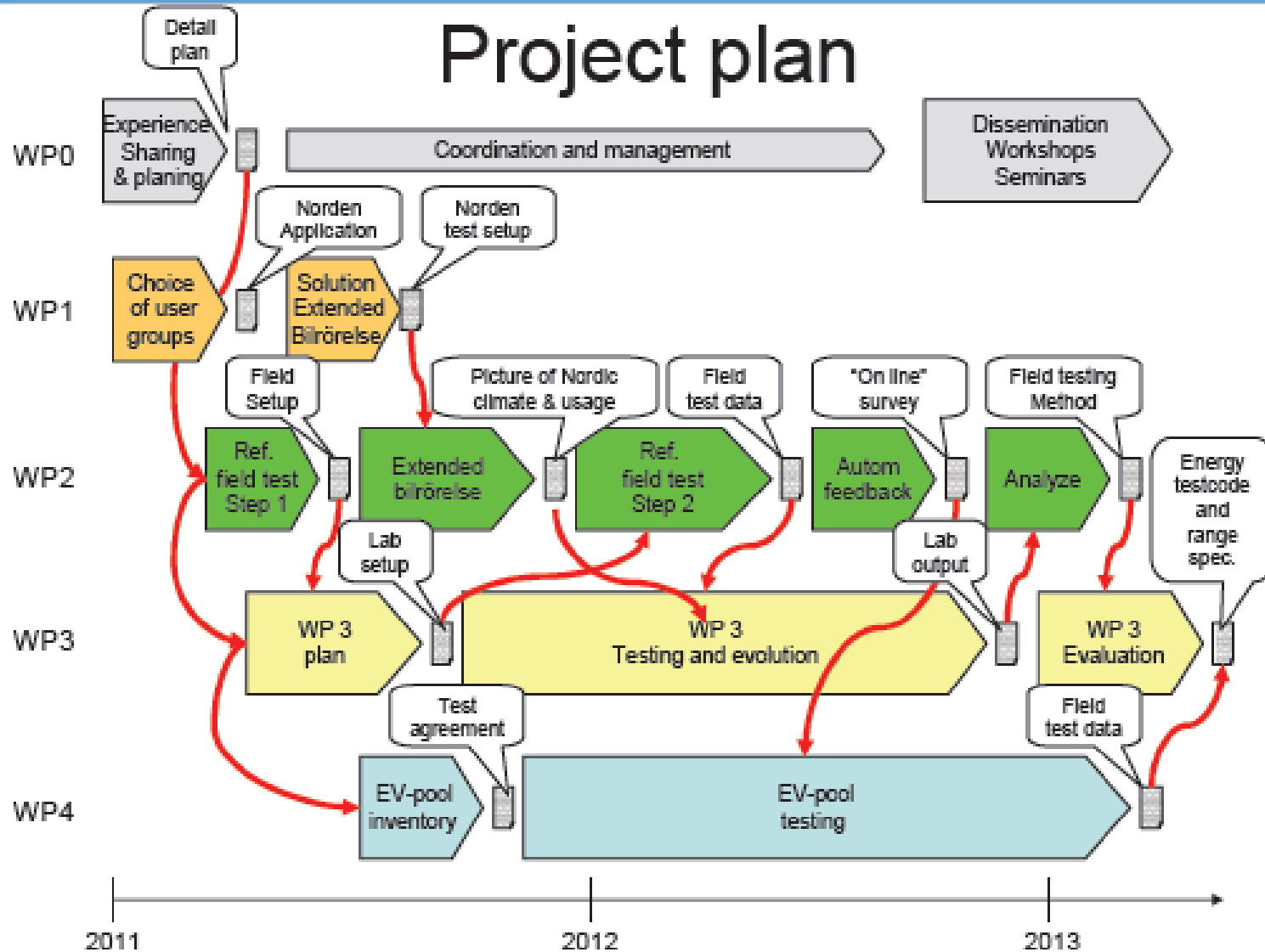
WP0 Coordination and Dissemination

WP1 Duty cycle analysis

WP2 Test protocol tools

WP3 Application of the laboratory test protocol on 3 EV types

WP4 Field test of EV pool

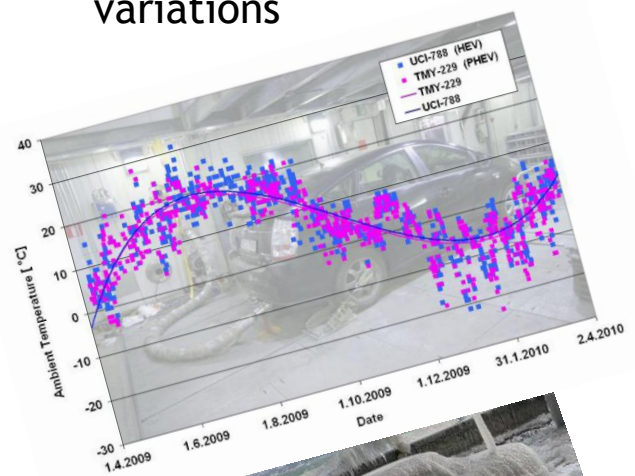
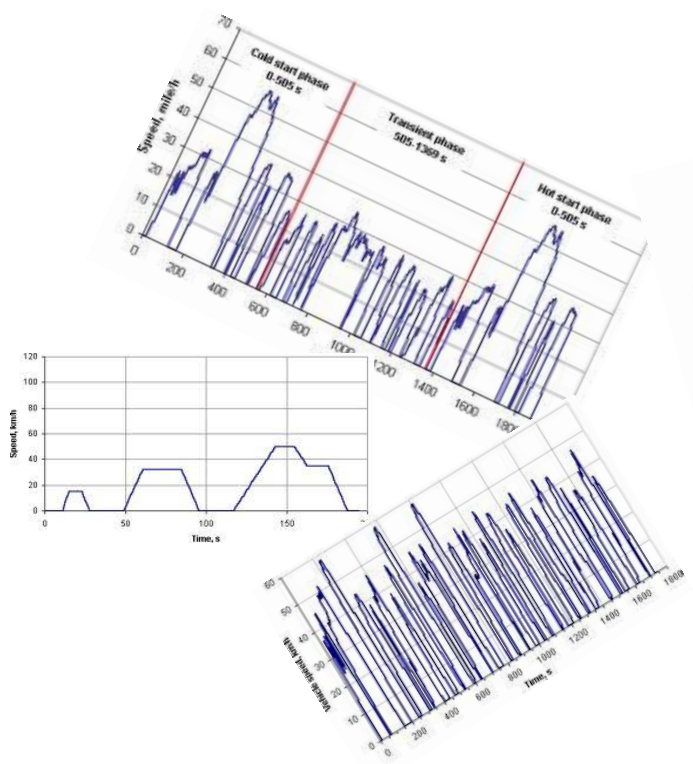




# WP1 Duty cycle analysis

Study of the Driving Cycles

Temperature & road condition variations



Typical trips&loads



TSS: Bilrörelse





# WP2 Test protocol tools

Field drive input from 80-100 ICE-vehicles will be logged

Test temperature and charging



Preheating of cabin during charge allowed at test protocol?

Cabin heating & auxiliary energy use



Vehicle load?  
Useful range criteria?  
Climb home range?

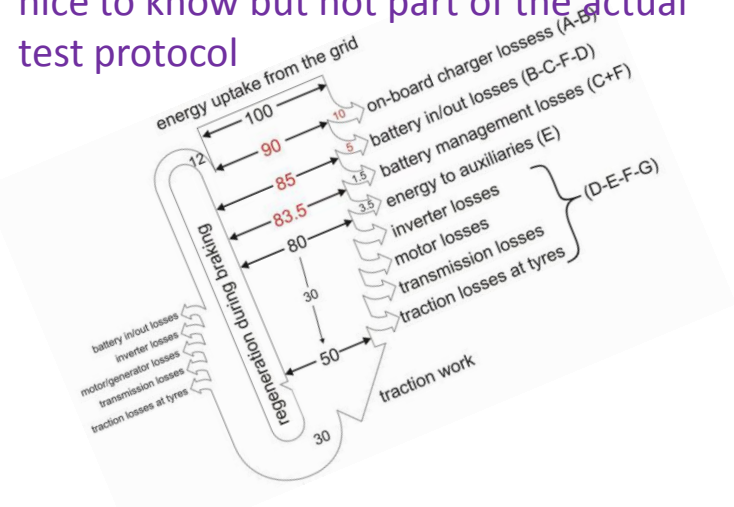




# WP3 Application of the laboratory test protocol on 3 EV types



Energy consumption (kWh/km) from the grid and efficiency inside EV are nice to know but not part of the actual test protocol

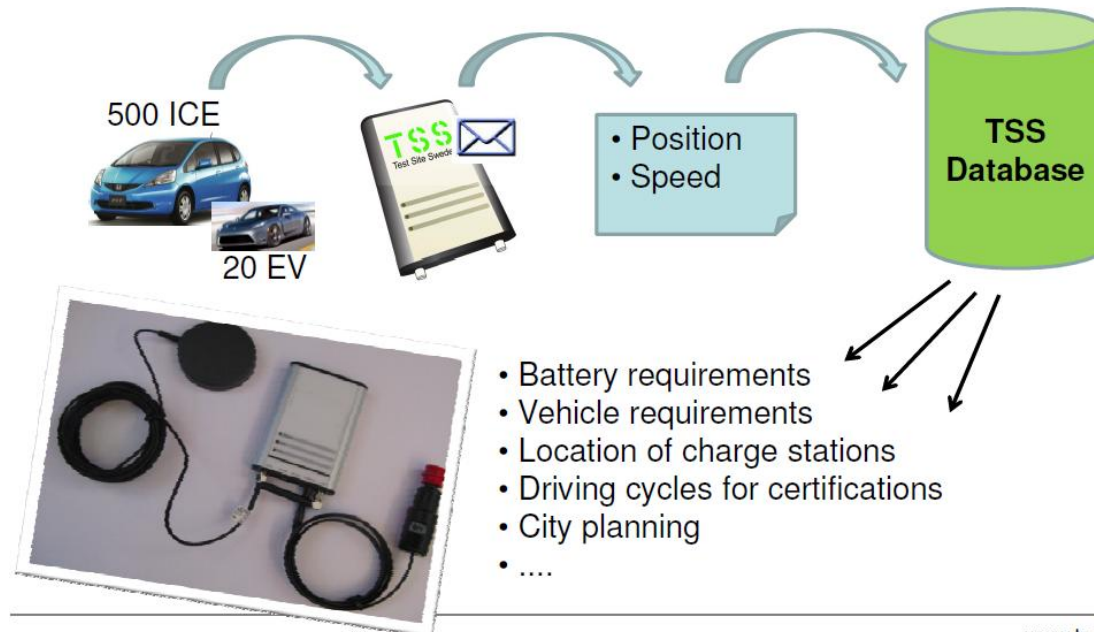


Useful driving range in Nordic conditions and accuracy of SOC meter are key figures to be tested!



# WP4 Field test of EV pool

## Vehicle Movement Database





# WPO Dissemination

## Dissemination Policy:

- Protocol development will be open for comments
- Co-operation with electric vehicle manufacturers is welcome

## Time schedule:

[11/2011 Lab-test protocol](#)

[07/2012 Database of lab test results](#)

[01/2013 Database of in-field test results](#)

[05/2013 Database of in-laboratory and in-field test programme results](#)

[05/2013 Final report](#)



# IDEA for Norden Energy&Transport

World most important Electric and Hybrid vehicle research conference  
EVS27 will be held in June 2013 in Barcelona

Norden could use this event as place for exhibit it's own activities and also encourage project give papers to the conference

EVS24 was held in Stavanger! EVS30 could also be in Scandinavia if we are active enough



# Contact Information

Project will develop web page for dissemination purposes later 2011

Coordinator:

Arto Haakana  
Development Manager, Urban Energy Efficiency  
Green Net Finland  
Pakkalankuja 5  
FI-01510 Vantaa  
tel. +358 50 3485157  
email: [arto.haakana@greennetfinland.fi](mailto:arto.haakana@greennetfinland.fi)  
Skype: greennet\_arto  
<http://www.greennetfinland.fi>  
<http://www.energyandtransport.net>