HIGHVLOCITY

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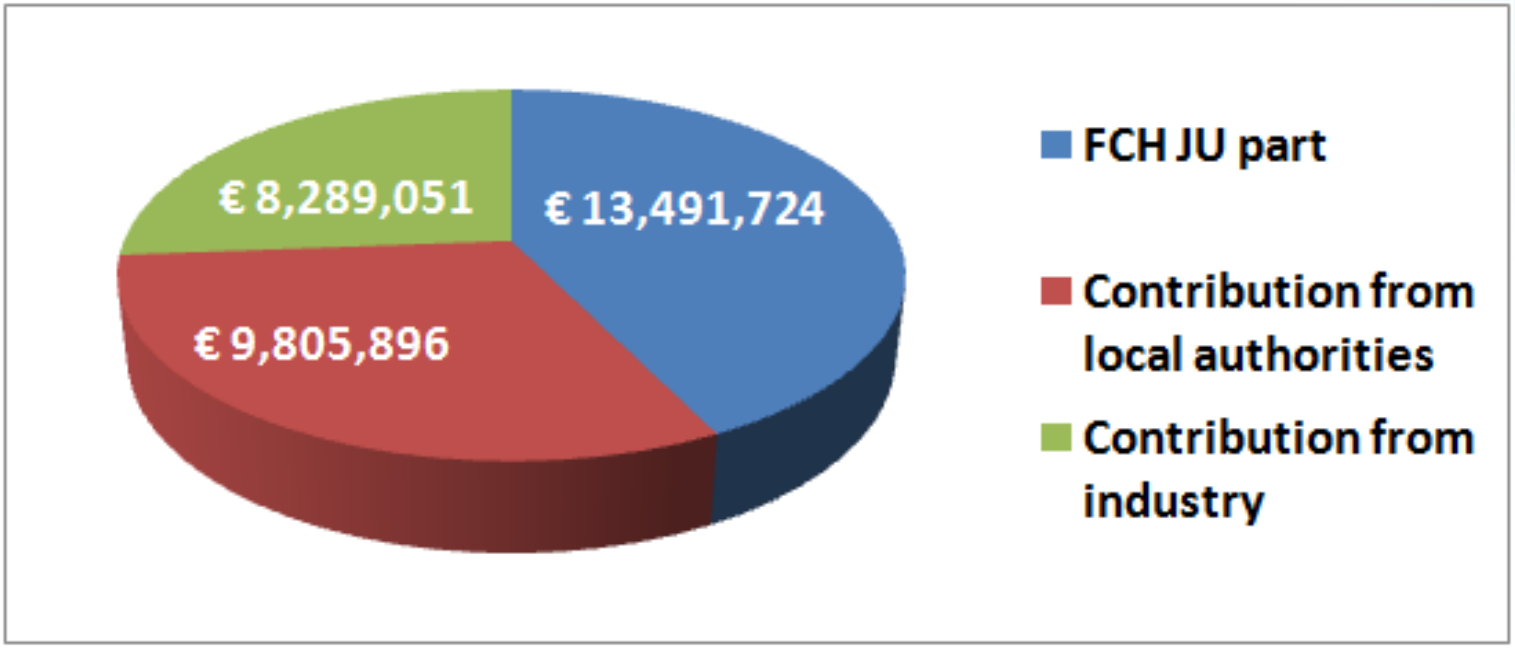
www.highvlocity.eu

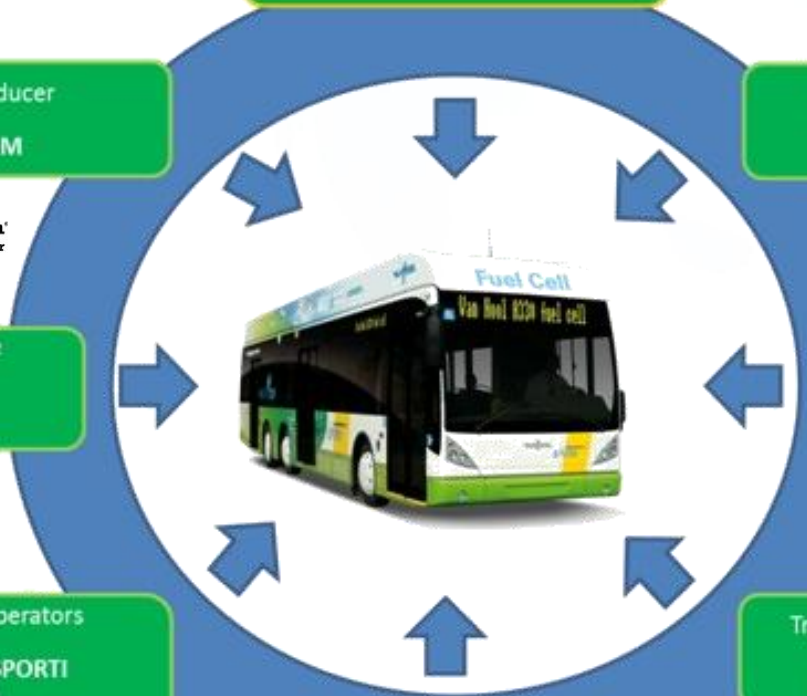
Project 278192

PROJECT OVERVIEW

- Cities speeding up de integration of hydrogen buses in public fleets
- SP1-JTI-FCH.2010.1.1
- 1/1/2012 – 31/12/2016



PROJECT OVERVIEW



Hydrogen bus producer

VAN HOOL

Fuel Cell producer

DANTHERM

Transport & Management

FIT

Refueling infrastructure

SOLVAY

BALLST NEDAM

European Hydrogen Association

HYER

PT Transport Operators

RIVIERA TRASPORTI

DE LIJN

ABERDEEN CITY COUNCIL

Transport Research Institution

UNIVERSITY OF GENOA

Regional Public Administrations

WATERSTOFNET

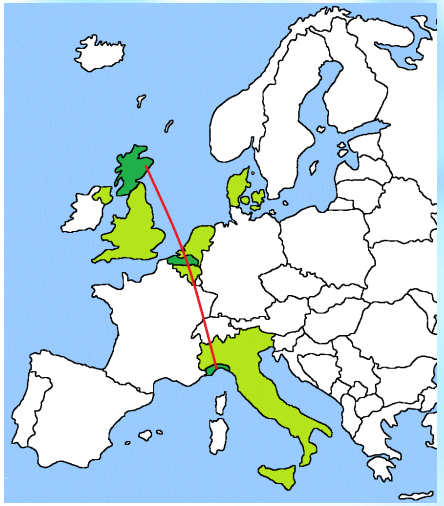
LIGURIA REGION

PROJECT OVERVIEW

The **overall objective** of High V.LO City is to facilitate rapid deployment of the last generation FCH buses in public transport operations, by addressing key environmental and operational concerns that transport authorities are facing today.

-3 demonstration pilots

-Creation of Clean Hydrogen Bus Centers of Excellence



	FC Bus	H2 production
Aberdeen (UK)	4	Sustainable production
Liguria (Italy)	5	Sustainable production
Antwerp (Belgium)	5	Industrial by product

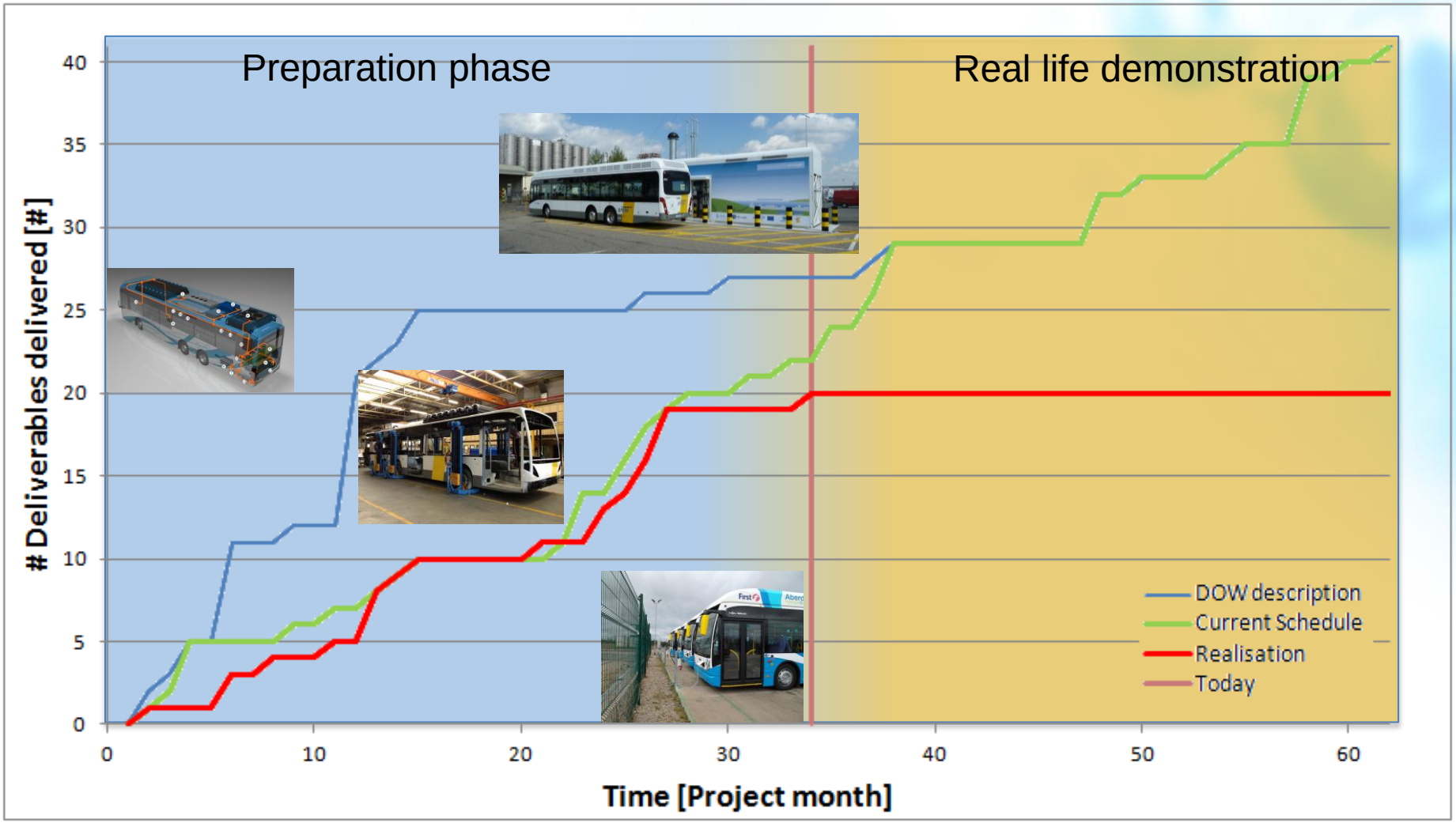
PROJECT TARGETS AND ACHIEVEMENTS

AIP target	Project Target	Current status/ achievements	Expected final achievement
Placing Europe at the forefront of FC technology to enable market breakthrough *(2010 target)*	High V.LO City aimes to facilitate a fast market introduction of FC technology	The demonstrations in HighV.LO city are ready to be launched (Aberdeen, Sanremo) or in service (Antwerp)	100% - no risk for final achievement
Speed up development of hydrogen supply and FC technologies *(2010 target)*	Centers of Excellence (CoE) installed in the project spread the hydrogen message	Centers of Excellence are being prepared and will come in the foreground once all three sites are full operational	100% - no risk for final achievement

PROJECT TARGETS AND ACHIEVEMENTS

MAIP target	Project Target	Status
2015 – 500 FC Buses at 10 sites	14 FC Buses at 3 new sites	All buses are delivered on site
Durability over 5.000 hours	15.000h warranty	Warranty is provided by FC supplier, still to be proven in real life operations
Roadmap for the establishment of commercial HRI	Demonstration of 3 functional HRI's and compliance with project KPI's	Antwerp site: functional Other sites: in progress
10-20% of H_2 demand should be produced carbon lean	2/3 of H_2 is produced sustainable	Antwerp site: functional Other sites: in progress

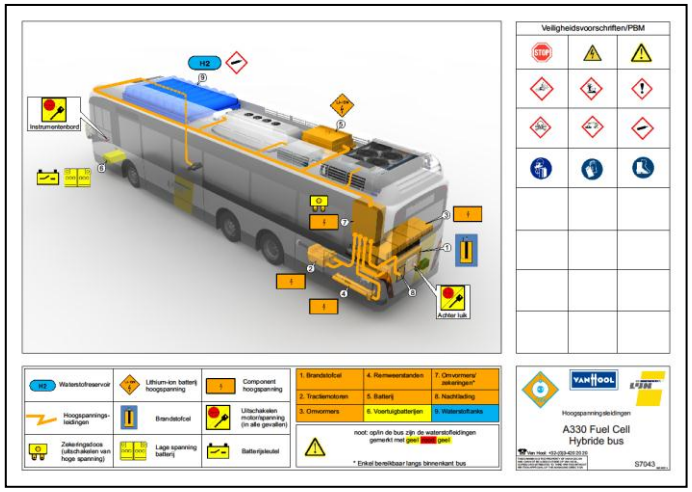
PROJECT TARGETS AND ACHIEVEMENTS



SYNERGIES WITH OTHER PROJECTS AND INITIATIVES

- Cofinances provided by local authorities of Scotland, Flanders and Liguria.
- High V.LO City builds further on CHIC results and is the starting base for 3EMOTION.
- Aberdeen site is present in both High V.LO City and HyTransit (FCH JU projects)

HORIZONTAL ACTIVITIES



- Training of drivers, technicians and fire brigade
- HAZOP studies for operations with FCB's in maintenance, refuelling and others
- Risk assessment during maintenance

DISSEMINATION ACTIVITIES

- Demo's all over Europe

  Riga, London, Stuttgart, Frankfurt, ...

- 49 publications in total so far
- Participation Futuris 'Euronews'

EXPLOITATION PLAN/EXPECTED IMPACT

- High V.LO City is an in-depth evaluation of the FC Bus technology that intends to create a wide acceptance of this technology and to indicate the still existing hurdles on the road.
- The projects' results will be exploited by all involved stakeholders in the deployment of new/additional fleets.
- Next stages:
  - Continued demonstration
  - Initiate new local hydrogen bus projects
  - Further enlarge existing fleets
- Cross-cutting:
  - SORT1 and 2 tests for hydrogen consumption
  - HAZOP analysis with measures
  - Risk analysis for workshop operations