# "Sustainable MARketdriven Terminal Solutions for Efficient freight Transport"

SMARTSET

The demand for urban freight transport has increased due to the concentration of the population in urban areas and as the majority of the industrial production is delivered there. Cities and regions must also deal with an increasing specialization of the urban and economic system, with a global division of production and its associated freight. Transport of goods, both over long distances and within cities, contributes a substantial part of the total emissions generated from the transport sector, as well as congestion. In urban areas up to 20 % of traffic, 30 % of street occupation and 50 % of greenhouse-gas emissions are generated by freight. A lot of transport operations start or finish in an urban area. More than 50 % of freight tonnes transported by road in Europe are carried for a distance of less than 50 kilometres.To tackle this challenge, the SMARTSET project develops and shows how freight transport in urban areas can be made more energy-efficient and sustainable by a better use of freight terminals. To achieve this, the project provides examples of good practice supporting cities, regions and countries to contribute to the European Union "20-20-20" targets: reducing greenhouse gas emissions by 20 %, increasing the share of renewables in energy consumption to 20 % and improving energy efficiency by 20 %, all by 2020.

## Results

- Creating cost effective solutions and sustainable business models for combined consolidation and zero-emission distribution of goods
- Demonstrating a model for zero-emission last mile distribution that can be adapted in a number of major, medium sized and small cities in Europe
- Demonstrating the potential of electric-powered distribution vehicles to and within cities
- Developing incentives and restrictions to stimulate consolidated distribution with electric-powered vehicles preserving and improving the quality of distribution services.
- Reduction of 9,051 tonnes $CO_2$ emissions per year, reduction of 36 GWh energy consumption per year, reduction of 3,104 tonnes energy consumption per year, reduction of 50% vehicle kilometers generated from distribution, 5 terminals operating on market based conditions during the project period, 8 business models for terminal schemes covering different geographical sites, 3 business models for terminal schemes envisaged to be set up after the project period.

## Lesson learned

- The Canvas business model as used in SMARTSET can be applied to all of the sites and provide a good way to structure thoughts about how to approach a business model. However, it is important that proper training is given as to how the model works, and the different elements involved. Operational issues are difficult to foresee from the start, and business models should be planned in order to allow a smooth resolution of them as they emerge.

- The difference between cities having established a city logistics policy in the past vs "newcomer" cities emerged. Common objective is to make more sustainable the transport with specific focus on freight transport for every site. Quite similar solutions are adopted for freight planning in the sites, even if they are characterized by the dimension of the site itself and by a sort of national approaches.
- Networking at local level requires a lot of time, and different approaches, and this should not be underestimated, notably for application sites that start from scratch. The same holds true for National Networks: While in a country like Sweden, there are already operational National Networks, countries like Austria and Germany have to start establishing one.

# Partners and coordinator

| | |
|---|---|
| City of Gothenburg [1] | Sweden |
| Swedish Transport Administration [2] | Sweden |
| Austrian Mobility Research / Forschungsgesellschaft Mobilitaet Gemeinnützige GmbH [3] | Austria |
| City of Graz [4] | Austria |
| Comune di Forli [5] | Italy |
| Trivector Traffic AB [6] | Sweden |
| Newcastle University [7] | United Kingdom |

# Contact

City of Gothenburg
Sweden

### Contact point

Name: tbc

# Budget

Overall budget: 1,00 € (EU contribution: 75,00 %)

# Key documents

- SMARTSET Project fact sheet [8]
  DOC 185 KB
- SMARTSET PPP [9]
  PPT 2.85 MB

# In brief

Sector: Energy-efficient transport

Duration: *01/06/2013* to *31/05/2016*

Contract number: IEE/12/714

Website: http://www.smartset-project.eu

**Tags:**

  freight
  transport
  urban development

# Related projects

- [[PTP-CYCLE](...) [10]] "Personalised Travel Planning for Cycling"
- [[MOBI](...) [11]] "Promoting Smart Mobility to Employees - MOBI"
- [[STARS](...) [12]] "Sustainable Travel Recognition and Accreditation for Schools"
- [[ACTUATE](...) [13]] Advanced Training and Education for Safe Eco-driving of Clean Vehicles
- [[AENEAS](...) [14]] Attaining Energy Efficient Mobility in an Ageing Society
- [[ADVANCE](...) [15]] Auditing and Certification Scheme to increase the quality of sustainable...
- [[CHUMS](...) [16]] Changing Habits for Urban Mobility Solutions
- [[C-LIEGE](...) [17]] Clean Last mile transport and logistics management for smart and Efficient...
- [[COMPETENCE](...) [18]] COMPETENCE - Strengthening the knowledge of local management agencies in...
- [[CYCLELOGISTICS](...) [19]] CYCLELOGISTICS Move goods by cycle
- [[CARMA](...) [20]] Cycling Awareness Raising and MArketing
- [[CHAMP](...) [21]] Cycling Heroes Advancing sustainable Mobility Practice
- [[SNOWBALL](...) [22]] Demonstration, take-up and further dissemination of sustainable integrated...
- [[ECOMOBILITY SHIFT](...) [23]] EcoMobility Scheme for Energy-Efficient Transport
- [[SWITCH](...) [24]] Encouraging a SWITCH from car-based to active mobility using personalised...
- [[ACTIVE ACCESS](...) [25]] Encouraging active travel for short trips to improve health and the local...
- [[ECORAILS](...) [26]] Energy efficiency and environmental criteria in the awarding of regional...
- [[ENCLOSE](...) [27]] ENergy efficiency in City LOgistics Services for small and mid-sized...
- [[EPOMM PLUS](...) [28]] EPOMM - Partners Learning Urban Sustainability
- [[ECODRIVEN](...) [29]] European Campaign On improving DRIVing behaviour, ENergy-efficiency and...
- [[FLEAT](...) [30]] Fleet Environmental Action and Assessment
- [[GO PEDELEC!](...) [31]] Go Pedelec!
- [[SmartMove](...) [32]] Increasing peoples' awareness and use of public transport through...
- [[MOVE](...) [33]] International Cluster for Mobility Management Development and Research...
- [[INTERACTION](...) [34]] INternational Transport and Energy Reduction ACTION - Energy efficiency...
- [[ISEMOA](...) [35]] ISEMOA - Improving seamless energy-efficient mobility chains for all
- [[MIDAS](...) [36]] Measures to Influence transport Demand to Achieve Sustainability
- [[MOMA.BIZ](...) [37]] Mobility Management for Business and Industrial Zones
- [[ADD HOME](...) [38]] Mobility Management for housing areas - from car-dependency to free choice
- [[MOMO CAR-SHARING](...) [39]] More Options for Energy Efficient Mobility through Car-Sharing

- [OBIS [40]] Optimising Bike Sharing in European Cities
- [POLY-SUMP [41]] Polycentric Sustainable Urban Mobility Plans
- [PRESTO [42]] Promoting cycling for everyone as daily transport mode
- [PUSH & PULL [43]] PUSH & PULL – Parking management and incentives as successful and...
- [QUEST [44]] QUEST - Quality management tool for Urban Energy efficient Sustainable...
- [RECODRIVE [45]] Rewarding and Recognition Schemes for Energy Conserving Driving, Vehicle...
- [START [46]] Short Term Actions to Reorganize Transport of goods
- [BIKE2WORK [47]] Smart Choice for commuters
- [SEEMORE [48]] Sustainable and Energy Efficient Mobility Options in tourist Regions in...
- [SPICYCLES [49]] Sustainable Planning & Innovation for Bicycles
- [STARTER [50]] Sustainable Transport for Areas with Tourism through Energy Reduction
- [TRAINER [51]] TRAining programmes to INcrease Energy-efficiency by Railways
- [TRAILBLAZER [52]] Transport and Innovation Logistics by Local Authorities with a Zest for...
- [TRAVEL PLAN PLUS [53]] Travel Reduction Attainment Via Energy-efficient Localities PLANning
- [TRENDY TRAVEL [54]] TRENDY TRAVEL; Emotions for sustainable transport
- [YOUTH [55]] Youngster Overhauls today's Urban Transport Habits

---

**Source URL:** https://ec.europa.eu/energy/intelligent/projects/en/projects/smartset

**Links**
[1] https://ec.europa.eu/energy/intelligent/projects/en/partners/city-gothenburg
[2] https://ec.europa.eu/energy/intelligent/projects/en/partners/swedish-transport-administration
[3] https://ec.europa.eu/energy/intelligent/projects/en/partners/fgm-amor-0
[4] https://ec.europa.eu/energy/intelligent/projects/en/partners/city-graz
[5] https://ec.europa.eu/energy/intelligent/projects/en/partners/comune-di-forli
[6] https://ec.europa.eu/energy/intelligent/projects/en/partners/trivector
[7] https://ec.europa.eu/energy/intelligent/projects/en/partners/newcastle-university
[8] https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/smartset_2015.06.doc
[9] https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/smartset_2015.06.ppt
[10] https://ec.europa.eu/energy/intelligent/projects/en/projects/ptp-cycle
[11] https://ec.europa.eu/energy/intelligent/projects/en/projects/mobi
[12] https://ec.europa.eu/energy/intelligent/projects/en/projects/stars
[13] https://ec.europa.eu/energy/intelligent/projects/en/projects/actuate
[14] https://ec.europa.eu/energy/intelligent/projects/en/projects/aeneas
[15] https://ec.europa.eu/energy/intelligent/projects/en/projects/advance
[16] https://ec.europa.eu/energy/intelligent/projects/en/projects/chums
[17] https://ec.europa.eu/energy/intelligent/projects/en/projects/c-liege
[18] https://ec.europa.eu/energy/intelligent/projects/en/projects/competence
[19] https://ec.europa.eu/energy/intelligent/projects/en/projects/cyclelogistics
[20] https://ec.europa.eu/energy/intelligent/projects/en/projects/carma
[21] https://ec.europa.eu/energy/intelligent/projects/en/projects/champ
[22] https://ec.europa.eu/energy/intelligent/projects/en/projects/snowball
[23] https://ec.europa.eu/energy/intelligent/projects/en/projects/ecomobility-shift
[24] https://ec.europa.eu/energy/intelligent/projects/en/projects/switch
[25] https://ec.europa.eu/energy/intelligent/projects/en/projects/active-access
[26] https://ec.europa.eu/energy/intelligent/projects/en/projects/ecorails
[27] https://ec.europa.eu/energy/intelligent/projects/en/projects/enclose
[28] https://ec.europa.eu/energy/intelligent/projects/en/projects/epomm-plus
[29] https://ec.europa.eu/energy/intelligent/projects/en/projects/ecodriven
[30] https://ec.europa.eu/energy/intelligent/projects/en/projects/fleat
[31] https://ec.europa.eu/energy/intelligent/projects/en/projects/go-pedelec

[32] https://ec.europa.eu/energy/intelligent/projects/en/projects/smartmove
[33] https://ec.europa.eu/energy/intelligent/projects/en/projects/move
[34] https://ec.europa.eu/energy/intelligent/projects/en/projects/interaction
[35] https://ec.europa.eu/energy/intelligent/projects/en/projects/isemoa
[36] https://ec.europa.eu/energy/intelligent/projects/en/projects/midas
[37] https://ec.europa.eu/energy/intelligent/projects/en/projects/momabiz
[38] https://ec.europa.eu/energy/intelligent/projects/en/projects/add-home
[39] https://ec.europa.eu/energy/intelligent/projects/en/projects/momo-car-sharing
[40] https://ec.europa.eu/energy/intelligent/projects/en/projects/obis
[41] https://ec.europa.eu/energy/intelligent/projects/en/projects/poly-sump
[42] https://ec.europa.eu/energy/intelligent/projects/en/projects/presto
[43] https://ec.europa.eu/energy/intelligent/projects/en/projects/push-pull
[44] https://ec.europa.eu/energy/intelligent/projects/en/projects/quest
[45] https://ec.europa.eu/energy/intelligent/projects/en/projects/recodrive
[46] https://ec.europa.eu/energy/intelligent/projects/en/projects/start
[47] https://ec.europa.eu/energy/intelligent/projects/en/projects/bike2work
[48] https://ec.europa.eu/energy/intelligent/projects/en/projects/seemore
[49] https://ec.europa.eu/energy/intelligent/projects/en/projects/spicycles
[50] https://ec.europa.eu/energy/intelligent/projects/en/projects/starter
[51] https://ec.europa.eu/energy/intelligent/projects/en/projects/trainer
[52] https://ec.europa.eu/energy/intelligent/projects/en/projects/trailblazer
[53] https://ec.europa.eu/energy/intelligent/projects/en/projects/travel-plan-plus
[54] https://ec.europa.eu/energy/intelligent/projects/en/projects/trendy-travel
[55] https://ec.europa.eu/energy/intelligent/projects/en/projects/youth