



# **Triangulum**

**Project ID: 646578** 

Funded under: H2020-EU.3.3.1.3. - Foster European Smart cities and

Communities

## Triangulum: The Three Point Project / Demonstrate. Disseminate. Replicate.

From 2015-02-01 to 2020-01-31, ongoing project

## **Project details**

**Total cost:** 

EUR 29 501 430.98

**EU** contribution:

EUR 25 420 602.30

Coordinated in:

Germany

Topic(s):

SCC-01-2014 - Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of

the kind) projects

Call for proposal:

H2020-SCC-2014 See other projects for this call

**Funding scheme:** 

IA - Innovation action

## **Objective**

The Triangulum project will demonstrate how a systems innovation approach based around the European Commission's SCC Strategic Implementation Plan can drive dynamic smart city development. We will test the SIP across three lighthouse cities: Manchester, Eindhoven and Stavanger, which represent the main typologies of European cities. They will be complemented by our follower cities Prague, Leipzig and Sabadell. This powerful combination reflects an urban population of between 100k and 1,2m inhabitants across six different countries, allowing us to demonstrate successful replication across a wide range of typical urban areas in Europe. Each city has already made significant progress towards the transition of becoming a smart city; developing their own individual approach reflecting specific local circumstances. These inherent strengths will now serve to accelerate the smart city development across proposed demonstration sites within Triangulum. The suite of projects developed will be based around zero/low energy districts, integrated infrastructures and sustainable urban mobility designed to deliver a range of cross-cutting outcomes across different sectors and stakeholders. This will provide the basis to 'road test' the SIP and provide recommendations to the Commission on how it could be improved to facilitate wider replication. The Triangulum goals target a series of direct impacts around; reduced energy consumption of buildings, increased use of renewable energies, increased utilisation of electric vehicles, deployment of intelligent energy management technologies and the deployment of an adaptive and dynamic ICT data hub. The design and implementation of innovative Business Models and the activation of citizens as co-creators are core cross-cutting elements to base the technologies in real-world city environments and facilitate replication.

#### **Related information**

**Report Summaries** 

Periodic Reporting for period 1 - Triangulum (Triangulum: The Three Point Project / Demonstrate. Disseminate. Replicate.)

#### Coordinator

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.

Germany

HANSASTRASSE 270

**EU contribution:** EUR 1 159 307,19

80686 MUNCHEN

Germany

**Activity type:** Research Organisations

Contact the organisation

**Participants** 

STEINBEIS INNOVATION GGMBH Germany

WILLI BLEICHER STRASSE 19 EU contribution: EUR 608 625

70174 STUTTGART

Germany

**Activity type:** Research Organisations

Contact the organisation

UNIVERSITAET STUTTGART Germany

KEPLERSTRASSE 7 **EU contribution:** EUR 503 125

70174 STUTTGART

Germany

**Activity type:** Higher or Secondary Education Establishments

Contact the organisation

MANCHESTER CITY COUNCIL United Kingdom

ALBERT SQUARE

M60 2LA MANCHESTER

EU contribution: EUR 1 013
733,50

United Kingdom

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

THE MANCHESTER METROPOLITAN UNIVERSITY

United Kingdom

OXFORD ROAD ALL SAINTS BUILDING **EU contribution:** EUR 291

M15 6BH MANCHESTER 471,88

**United Kingdom** 

**Activity type:** Higher or Secondary Education Establishments

Contact the organisation

THE UNIVERSITY OF MANCHESTER United Kingdom

OXFORD ROAD **EU contribution:** EUR 965 951,56

M13 9PL MANCHESTER

United Kingdom

**Activity type:** Higher or Secondary Education Establishments

**Administrative contact:** Liz Fay

Tel.: +44 161 306 6000 Contact the organisation

SIEMENS PLC United Kingdom

SIR WILLIAM SIEMENS SQUARE FARADAY HOUSE FRIMLEY **EU contribution:** EUR 4 189

725,40 **GU168QD CAMBERLEY** 

United Kingdom

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

CLICKS AND LINKS LTD United Kingdom

MOSS ROAD 28 **EU contribution:** EUR 399

551.25 SK9 7HZ Alderley Edge

United Kingdom

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

**GEMEENTE EINDHOVEN** Netherlands

STADHUISPLEIN 10 **EU contribution:** EUR 1 526

739.42 5600 EINDHOVEN

Netherlands

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

STICHTING WOONBEDRIJF SWS HHVL Netherlands

WAL 2 EU contribution: EUR 1 941 975

5611 HD EINDHOVEN

Netherlands

Activity type: Other Contact the organisation

TECHNISCHE UNIVERSITEIT EINDHOVEN Netherlands

**GROENE LOPER 5 EU contribution:** EUR 577

756.25 5612 EINDHOVEN

Netherlands

**Activity type:** Higher or Secondary Education Establishments

Contact the organisation

STRIJP S ONTWIKKELING BV

Netherlands

561,05

**REGGESINGEL 4 EU contribution:** EUR 2 541

7461 BA RIJSSEN

Netherlands

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

Koninklijke KPN NV Netherlands

**MAANPLEIN 55 EU contribution:** EUR 525 770

2516 The Hague Netherlands

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

Stavanger kommune Norway

Olav Kyrresgate 23 **EU contribution:** EUR 3 343

702,50 4068 Stavanger

Norway See on map

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

GREATER STAVANGER ECONOMIC DEVELOPMENT AS Norway

PROFESSOR OLAV HANSSENS VEI 7A **EU contribution:** EUR 300

129,38 **4068 STAVANGER** 

Norway

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

ROGALAND FYLKESKOMMUNE Norway

ARKITEKT ECKHOFFS GATE 1 **EU contribution:** EUR 1 312

037,50 **4001 STAVANGER** 

Norway

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

UNIVERSITETET I STAVANGER Norway

KJELL ARHOLMS GATE 41 **EU contribution:** EUR 1 475

006,25 **4021 STAVANGER** 

Norway

**Activity type:** Higher or Secondary Education Establishments

Contact the organisation

LYSE AS Norway

BREIFLATVEIEN 18

EU contribution: EUR 1 313
010.51

4017 STAVANGER

Norway

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

INSTITUT PLANOVANI A ROZVOJE HLAVNIHO MESTA PRAHY

**EU contribution:** EUR 355

Czech

VYSEHRADSKA 57/2077

193,75

128 00 PRAHA Czech Republic

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

AJUNTAMENT DE SABADELL Spain

PL. SANT ROC 1 EUR 392

08201 SABADELL 576,79

Spain

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

STADT LEIPZIG Germany

NEUES RATHAUS **EU contribution:** EUR 485

04109 LEIPZIG 662,50

Germany

Activity type: Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

TUV SUD IMMOWERT GMBH Germany

WESTENDSTRASSE 199 EU contribution: EUR 197

80686 MUNCHEN 990,62

Germany

Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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