

Project summary

Project Number	824418
Project Acronym	MAKING-CITY
Project title	Energy efficient pathway for the city transformation: enabling a positive future
Starting date	4 01/12/2018
Duration in months	60
Call (part) identifier	6 H2020-LC-SC3-2018-ES-SCC
Topic	LC-SC3-SCC-1-2018-2019-2020 Smart Cities and Communities

MAKING-CITY is a large-scale demonstration project aiming at the development of new integrated strategies to address the urban energy system transformation towards low carbon cities, with the positive energy district (PED) approach as the core of the urban energy transition pathway. The project will be intensively focused on achieving evidences about the actual potential of the PED concept, as foundation of a high efficient and sustainable route to progress beyond the current urban transformation roadmaps. Although in principle a PED approach seems a solid and ambitious strategy, this should be complemented with long term urban planning to ensure upscaling and fostering higher impacts. Currently city energy plans are starting to be designed with a 2030 horizon, according to the standard city commitments, as for instance those reflected in the SECAPs and other more specific city plans. Project will address methodologies to support cities in their long term urban planning towards an adequate energy transition, paving the way of the planning, implementation and up-scaling process. Cities of Groningen (Netherlands) and Oulu (Finland) will act as lighthouses. These cities are currently working intensively in ambitious transformation planning whose approaches fit perfectly with the project objectives. Both have committed to deploy a demonstration of at least one positive energy district. León (Spain), Bassano del Grappa (Italy), Kadiköy (Turkey), Poprad (Slovakia), Vidin (Bulgaria) and Lublin (Poland) will be the follower cities. All of them have assumed a huge commitment to develop a solid execution project of Positive Energy District and foster high level of replication of the solutions demonstrated in Groningen and Oulu.

Objectives Making City project

General objective

MAKING-CITY is a large-scale demonstration project aiming at the development of new integrated strategies to address the urban energy system transformation towards low carbon cities, with the positive energy district (PED) approach as the core of the urban energy transition pathway. The project will be intensively focused on achieving evidences about the actual potential of the PED concept, as foundation of a high efficient and sustainable route to progress beyond the current urban transformation roadmaps.

MAKING-CITY will address procedures and methodologies to support cities in their long term urban planning towards an adequate energy transition, paving the way of the planning, implementation and up-scaling process. This procedure will be approached by a 3-layers planning process: long term planning 2050 will be the high level approach, medium term approach (SEAP/SECAPS) towards 2030 and short term (execution plan) with a time horizon of about 5 years.

Groningen and Oulu will deploy very ambitious demonstration of PEDs, making different technical approaches, in order to set up the seed of a long term energy transformation strategy in the whole city.

Specific objectives

OBJECTIVE 1: Develop a Large scale demonstration of already defined Positive Energy Districts in two European cities, Groningen (Netherlands) and Oulu (Finland) as the foundation of a successful and ambitious urban energy transformation. The main targets of an intensive deployment of PEDs are to reduce the transition timing, increasing the decarbonization targets and ensuring citizen engagement and social acceptance.

OBJECTIVE 2: Develop a systematic “procedure” to support the definition of positive energy districts. A set of validated technical and non-technical solutions will be considered. In particular, regulation barriers, social issues and financial constrains will be taken into account to guarantee affordable and replicable PEDs

OBJECTIVE 3: Develop at least a PED execution project for each follower city, following the developed procedure in the previous objective. This will be a refinement of the initial replication plan, where several candidates areas to become positive energy districts, integrating technical solutions adapted to the local conditions and involving local stakeholders were identified.

OBJECTIVE 4: Develop methodologies and procedures to support the long term planning process as a City Vision 2050, integrating within a long term planning the existing medium term planning, typically the reference SEAP/SECAPS and develop guidelines to facilitate the deployment of the actions planned in short term implementation and execution plans. Develop a City Vision 2050 for each city (2 lighthouses and 6 followers).

OBJECTIVE 5: Develop a rigorous monitoring and evaluation programme, with special attention to data collection, regulation (GDPR), Indicators Framework and integration in a Monitoring platform

OBJECTIVE 6: Development of business models associated to the PED deployment, in order to foster the creation of a business ecosystem behind the PED concept.

OBJECTIVE 7: Development of social innovation activities, in order to favour the market leverage of technological solutions and promoting the creation of a business ecosystem behind the PED concept.

OBJECTIVE 8: Deploy an exploitation and market deployment strategy supporting industry partners in the definition of their pathway towards exploitation of the innovative results.

OBJECTIVE 9: Deploy a strong Communication and Dissemination strategy

OBJECTIVE 10: Link MAKING-CITY with the relevant cluster of similar projects to ensure cooperation. The current family of 12 Lighthouse projects are working in different concepts (high-performance districts, nearly-Zero Energy Districts or Zero Energy Emissions Districts). MAKING-CITY will collaborate with this group to learn from them but also to promote the long-term planning vision based on the Positive Energy District approach, as ground-breaking concepts in this type of projects.

Making City Grant Agreement

Grant Agreement number: 824418 — MAKING-CITY — H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-2018-ES-SCC

This Agreement ('the Agreement') is between the following parties:

on the one part, the Innovation and Networks Executive Agency (INEA), under the powers delegated by the European Commission ('the Commission'), represented for the purposes of signature of this Agreement by Head of Department, Innovation and Networks Executive Agency, H2020 Department for all technical projects and grant agreements, Alan HAIGH,

and on the other part,

1. 'the coordinator': **FUNDACION CARTIF (CAR)**, established in PQ TECNOLOGICO BOECILLO 205, BOECILLO 47151, Spain, VAT number: ESG47565478, represented for the purposes of signing the Agreement by Management Director, Julio GONZALEZ and the following other beneficiaries, if they sign their 'Accession Form' (see Annex 3 and Article 56):
2. **FUNDACION TECNALIA RESEARCH & INNOVATION (TEC)**, established in PARQUE CIENTIFICO Y TECNOLOGICO DE GIPUZKOAPASEO MIKELETEGI 2, DONOSTIA SAN SEBASTIAN 20009, Spain, VAT number: ESG48975767,
3. **GEMEENTE GRONINGEN (GRO)**, established in GROTE MARKT 1, GRONINGEN 9712 HN, Netherlands, VAT number: NL001932809B01,
4. **NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO (TNO)**, established in ANNA VAN BUERENPLEIN 1, DEN HAAG 2595 DA, Netherlands, VAT number: NL002875718B01,
5. **COOPERATIEVE VERENIGING GRUNNEGER POWER UA (GPO)**, established in OUDE BOTERINGESTRAAT 68, GRONINGEN 9712 GN, Netherlands, VAT number: NL850458924B01,
6. **STICHTING ENERGY VALLEY (SEV)**, established in LAAN CORPUS DEN HOORN 300, GRONINGEN 9728 JT, Netherlands, VAT number: NL812873312B01,
7. **WAARBORG MEDIACENTRALE NV (WAM)**, established in PIEZERWEG 87, GRONINGEN 9727 AH, Netherlands, VAT number: NL822816878B01,
8. **STICHTING NIJESTEE (NIJ)**, established in DAMSTERPLEIN 1, GRONINGEN 9700 AK, Netherlands, VAT number: NL803036188B01,
9. **CGI NEDERLAND BV (CGI)**, established in GEORGE HINTZENWEG 89, ROTTERDAM 3068 AX, Netherlands, VAT number: NL001620952B01,
10. **SUSTAINABLE BUILDINGS BV (SB)**, established in NIJENBORGH 9, GRONINGEN 9747 AG, Netherlands, VAT number: NL856521383B01,
11. **RIJKSUNIVERSITEIT GRONINGEN (RUG)**, established in Broerstraat 5, GRONINGEN 9712CP, Netherlands, VAT number: NL001932706B01,
12. **HANZEHOGESCHOOL GRONINGEN STICHTING (HUAS)**, established in ZERNIKEPLEIN 1, GRONINGEN 9747 AS, Netherlands, VAT number: NL803572529B01,
13. **OULUN KAUPUNKI (OUK)**, established in TORIKATU 10 A, OULUN 90100, Finland, VAT number: FI01876901,

14. **OULUN YLIOPISTO (UOU)**, established in PENTTI KAITERAN KATU 1, OULU 90014, Finland, VAT number: FI02458955,
15. **OULUN ENERGIA OY (OEN)**, established in KASARMINTIE 6, OULU 90101, Finland, VAT number: FI09893765,
16. **OULUN SIVAKKA OY (SIV)**, established in MYLLYTULLINKATU 4, OULU 90130, Finland, VAT number: FI05104386,
17. **YIT RAKENNUS OY (YIT)**, established in PANUNTIE 11, HELSINKI 00620, Finland, VAT number: FI15655835,
18. **JETITEK OY (JET)**, established in TELETIE 6, ROVANIEMI 96100, Finland, VAT number: FI22790795,
19. **ARINAN KIINTEISTOT OY (ARI)**, established in NUOTTASAARENTIE 1, OULU 90400, Finland, VAT number: FI21568105,
20. **Teknologian tutkimuskeskus VTT Oy (VTT)**, established in VUORIMIEHENTIE 3, Espoo 02150, Finland, VAT number: FI26473754,
21. **COMUNE DI BASSANO DEL GRAPPA (BAS)**, established in VIA MATTEOTTI 39, BASSANO DEL GRAPPA 36061, Italy, VAT number: IT00168480242,
22. **UNISMA RT PADOVA ENTERPRISE SRL (UNI)**, established in VIA OTTO FEBBRAIO 1848 2, PADOVA 35122, Italy, VAT number: IT04983000284,
23. **León City Council - Ayuntamiento de León (LEO)**, established in Ordoño II 10, León 24071, Spain, VAT number: ESP2409100A,
24. **KADIKOY BELEDIYESI (KM)**, established in HASAN MAHALLESİ FEHRETTİN KERİM GOKAY CADDESİ NO.2, İSTANBUL 34722, Turkey, VAT number: TR4860032364,
25. **DE SURDURULEBİLİR ENERJİ VE İNŞAAT SANAYİ TİCARET LİMİTED SİRKETİ (DEM)**, established in BARBAROS MAH. TOPHANELİOĞLU CAD. MURAT SİTESİ NO 74 I BLOK D 18, USKUDAR 34662, Turkey, VAT number: TR2710797541,
26. **MESTO POPRAD (POP)**, established in POPRADSKÉ NABREŽIE 2802/3, POPRAD 058 01, Slovakia,
27. **SLOVENSKA TECHNICKÁ UNIVERZITA V BRATISLAVE (STU)**, established in VAZOVOVA 5, BRATISLAVA 81243, Slovakia, VAT number: SK2020845255,
28. **OBSHTINA VIDIN (VID)**, established in PL BDINTSI NR 2, VIDIN 3700, Bulgaria, VAT number: BG000159508,
29. **CLUSTER ZELENA SINERGIYA (GSC)**, established in RUSKI 139 BLUD FL 4, PLOVDIV 4000, Bulgaria, VAT number: BG176168560,
30. **GMINA LUBLIN (LUB)**, established in PL KROLA WLADYSLAWA LOKIETKA 1, LUBLIN 20 109, Poland, VAT number: PL9462575811,
31. **LGI CONSULTING (LGI)**, established in 6 CITE DE L'AMEUBLEMENT, PARIS 75011, France, VAT number: FR11485241368,
32. **R2M SOLUTION (R2M)**, established in QUARTIER DU BEAUMON LES GALERIES DE BEAUMON, ROQUEFORT LES PINS 06330, France, VAT number: FR11828579367,
33. **GREEN BUILDING COUNCIL-ESPANA CONSEJO PARA LA EDIFICACION SOSTENIBLE-ESPANA (GBCE)**, established in PASEO DE LA CASTELLANA 114, MADRID 28046, Spain, VAT number: ESG85364222,
34. **CAP DIGITAL (CAP)**, established in 14 RUE ALEXANDRE PARODI, PARIS 75010, France,

Profile

From the local office in Groningen, CGI has a dedicated energy team available to join the project team. CGI Groningen is part of CGI Nederland B.V. and has access to the worldwide expertise of CGI in the fields of business consulting, systems integration and managed services. With 72,500 professionals operating in 400 offices in 40 countries, CGI fosters local accountability for client success while bringing global delivery capabilities to clients' front doors. Founded in 1976, CGI applies a disciplined delivery approach that has achieved an industry leading track record of delivering 95% of projects on-time and on budget. Our high-quality business consulting, systems integration and managed services help clients leverage current investments while adopting new technology and business strategies that achieve top and bottom line results. As a demonstration of our commitment, our client satisfaction score consistently measures higher than 9 out of 10. Visit cgi.com for more information.

MAIN TASKS IN THE PROJECT

CGI Netherlands B.V. will be involved in the project as key ICT solution partner for the Groningen Lighthouse. In this role CGI will offer the energy platform and leads the integration of the new innovative solutions and protocols into a central and secure data environment. Additionally CGI will be in leading in setting the data-requirements for future energy Lighthouse cities and connect to the central systems. As ensuring sensitive personal data in complex IT systems, has been a priority for the success of the project, CGI will lead the project regarding data security, privacy compliancy and authorization.

Main contribution to the technical work packages of MAKING-CITY:

WP	Main contribution
WP3	Support to Groningen demonstrations and intervention as software expert. Main contributions will be to Smart Energy Systems in PED and the ICT platform.
WP5	Leader of the ICT urban platform in Groningen. Contributor to other tasks related to the evaluation framework.
WP6	Contributor to tasks related with exploitation and business models.

Links

- <http://makingcity.eu/>
- <https://cordis.europa.eu/project/id/824418>
- <https://ec.europa.eu/programmes/horizon2020/en>