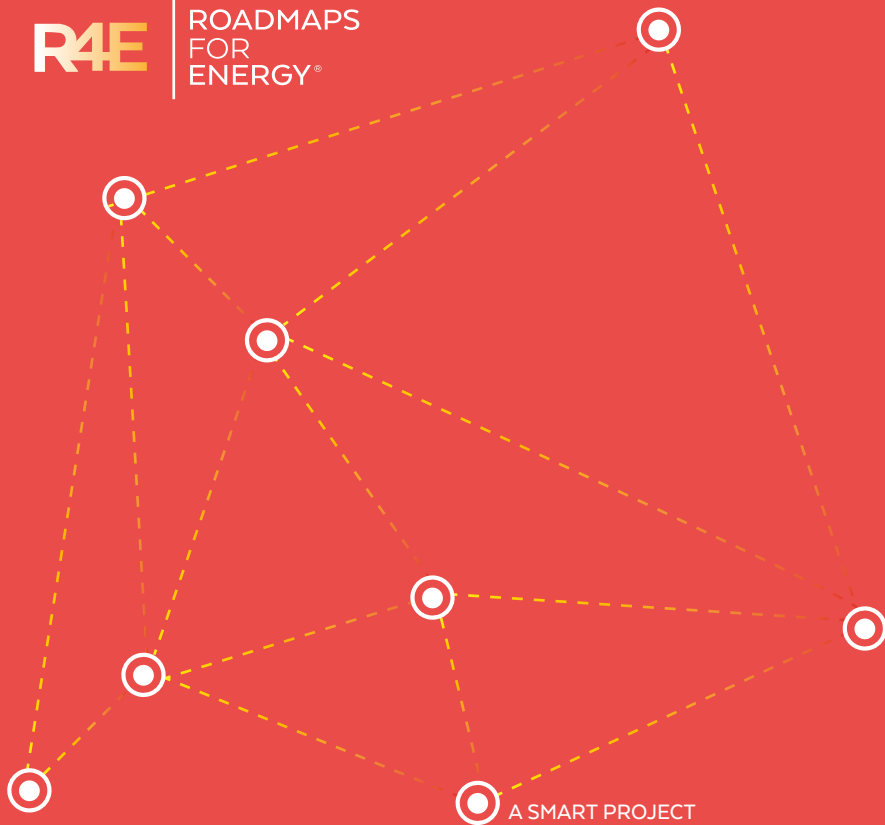




ROADMAPS
FOR
ENERGY®



A SMART PROJECT
4 SMART CITIES



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THE PROJECT

Roadmaps for Energy (R4E) is a project funded under the European Union's Horizon 2020 research and innovation programme. In the R4E project the 10 consortium partners will work together to develop a new type of energy strategy, which they call their Energy Roadmap.

R4E focuses on **developing vision creation and roadmapping capacities** within municipalities to initiate joint activities to spur development and implementation of **innovative energy solutions in cities**.

The ultimate aim is to implement a process that allows the 8 partner cities to develop roadmaps for the various themes that together form the Energy Roadmap towards their ambition of becoming Smart Cities. R4E focuses on three areas within the domain of sustainable energy that are closely linked to the municipalities main responsibilities:

- > Smart Buildings
- > Smart Mobility
- > Smart Urban Spaces

- > Total budget: EUR 1,999,840.00
- > Duration: 1 March 2015 – 1 March 2018 (36 months)

EACH CITY SELECTS TWO FOCUS AREAS FOR THEIR ROADMAPS



SMART BUILDINGS

- > Forlì
- > Newcastle- domestic & non-domestic
- > Murcia
- > Tallinn
- > Palermo
- > Sant Cugat del Vallès



SMART MOBILITY

- > Eindhoven
- > Istanbul -public transport & intelligent traffic management
- > Murcia
- > Tallinn
- > Palermo



SMART URBAN SPACES

- > Eindhoven
- > Forlì
- > Sant Cugat del Vallès

SCOPE OF THE ROADMAPS

For each of the three themes we will create roadmaps that cover different elements of sustainability that need to go hand in hand to achieve the desired future scenarios:

Sustainable technologies / Sustainable behaviour / Sustainable organization

SMART BUILDINGS

- > Homes, public & commercial buildings
- > Energetic building renovation
- > Integral comfort
- > Smart solutions

SMART MOBILITY

- > Next generation vehicles
- > Intelligent traffic management
- > Public & private transport
- > Modality shift
- > Smart Logistics

SMART URBAN SPACES

- > Public spaces
- > Land-use planning
- > City or area wide solutions
- > Smart ICT based solutions (e.g. lighting, waste, water)

IN THE R4E PROJECT A FOUR STEP PROCESS IS APPLIED

1

The **FIRST** step sets the ambitions for the project.



2

The **SECOND** step is to develop desired scenarios for the cities for the selected focus areas.



3

During the **THIRD** step, the roadmap will be created.



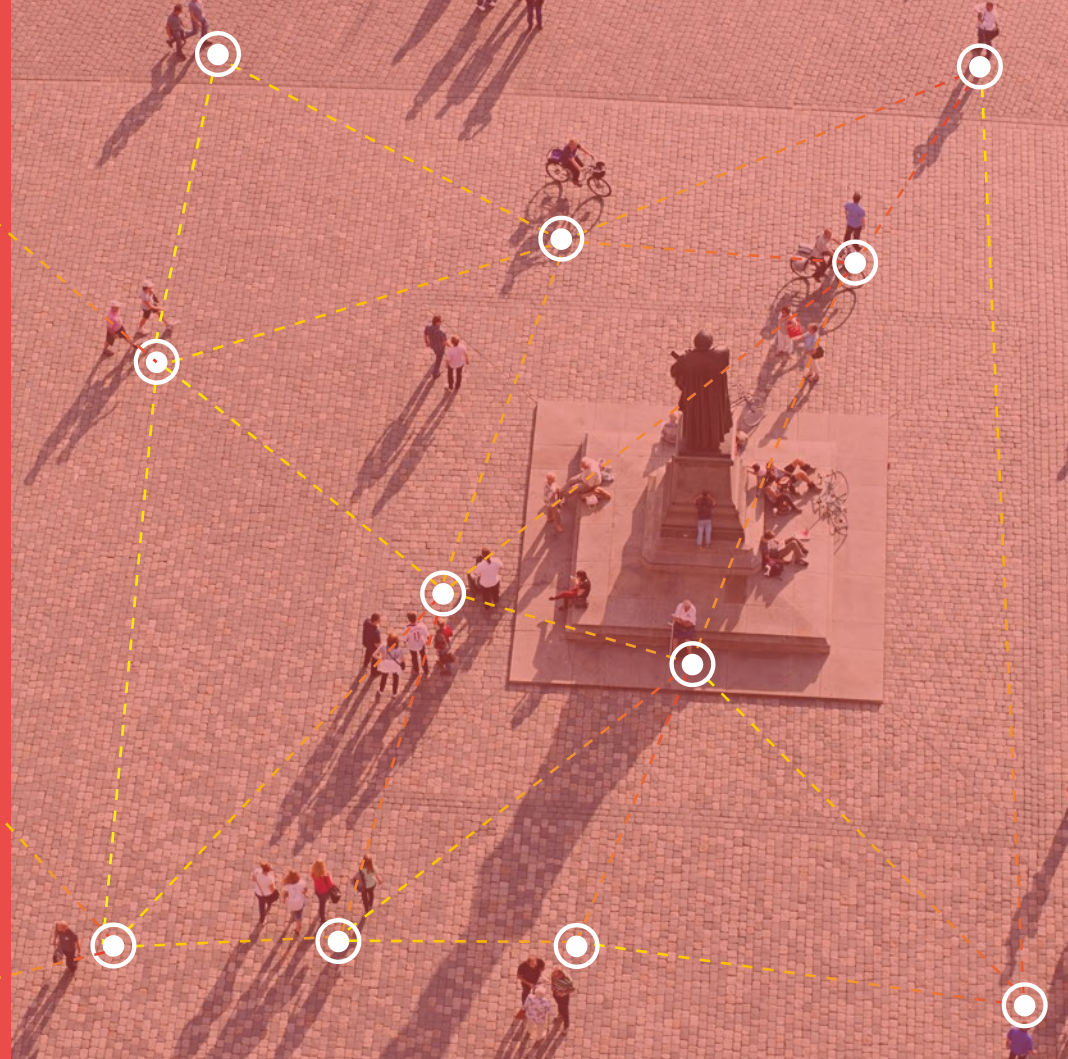
4

During the final and **FOURTH** step a project portfolio will be generated with new projects and initiatives to reach the ambitions.



At the end of the project each partner city will each have:

- > 2 future scenarios
- > 2 roadmaps
- > 1 portfolio of individual and joint projects to implement sustainable energy policies and measures.



LEARNING COMMUNITY ACTIVITIES AND CROSS-CITY LEARNING

They will be organized to guarantee that new projects will have to explore many new roads stating cross-learning objectives to grow in higher pace as a learning community.



THE MAIN TARGET GROUPS OF THE R4E PROJECT ARE:

- > Public sector decision and policy makers at local, regional, national and European level.
- > Universities and research centers involved in activities related to Energy related topics, and more specific to the three focus areas of R4E.
- > Other relevant networks, projects, companies and organizations involved in Energy related topics, and more specific to the three focus areas of R4E.
- > Local stakeholders relevant to local energy policies (citizens, public and private organizations and knowledge institutes).

WHAT ABOUT SAVING ENERGY?

The R4E project focuses on developing the instrumentation and the skills and capacities for local authorities to make more realistic and better implementable strategies and action plans built upon a more in-depth knowledge of the state of technology today.



The immediate energy savings within the lifetime of the project are not significant. The partners do not expect to carry out, within the lifetime of the project, important energy related investments that are due to the new insights that the project delivers. However, the project will deliver all the tools for significant savings in energy consumption starting towards the end of the project.



Starting in year 4 after the start of the project, the average annual reduction in energy consumption in the partner cities is estimated at 3-4 % on top of current estimated figures.

4%

WHO'S BEHIND?

The R4E consortium consists of 10 partners, 8 cities and 2 knowledge partners, from six countries: the Netherlands, Italy, Turkey, United Kingdom, Spain and Estonia.



The Project coordinator is the city of Eindhoven (NL), while Eindhoven University of Technology (TU/e), more specifically the TU/e LightHouse, experienced in developing Visions & Roadmaps for municipalities, has a major role in the process of R4E, supporting and guiding each partner city through the entire process.

CONTACT INFO

Project coordinator:

Eindhoven / www.eindhoven.nl / www.eindhoven.eu

Rest of the Partners:

Forlì / www.comune.forli.fc.it

Newcastle / www.newcastle.gov.uk

Murcia / www.murcia.es

TU/e / www.tue-lighthouse.nl / www.tue.nl/en

Sant Cugat del Vallès / www.santcugat.cat

Istanbul / www.ibb.gov.tr

Tallinn / www.tallinn.ee

UPC / www.upc.edu

Palermo / www.comune.palermo.it

R4E Project Partners





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ROADMAPS FOR ENERGY PARTNERS



EINDHOVEN



Newcastle
City Council



TU/e
Technische Universiteit
Eindhoven
University of Technology



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