



# e-GOTHAM

*Sustainable Smart Grid Open System for the Aggregated Control, Monitoring and Management of Energy*

## EXECUTIVE summary

e-GOTHAM aims to implement a new aggregated energy demand model by increasing management efficiency, raising energy consumption awareness and stimulating the development of a leading-edge market for energy-efficient technologies with new business models.

## RELEVANCE CALL objectives

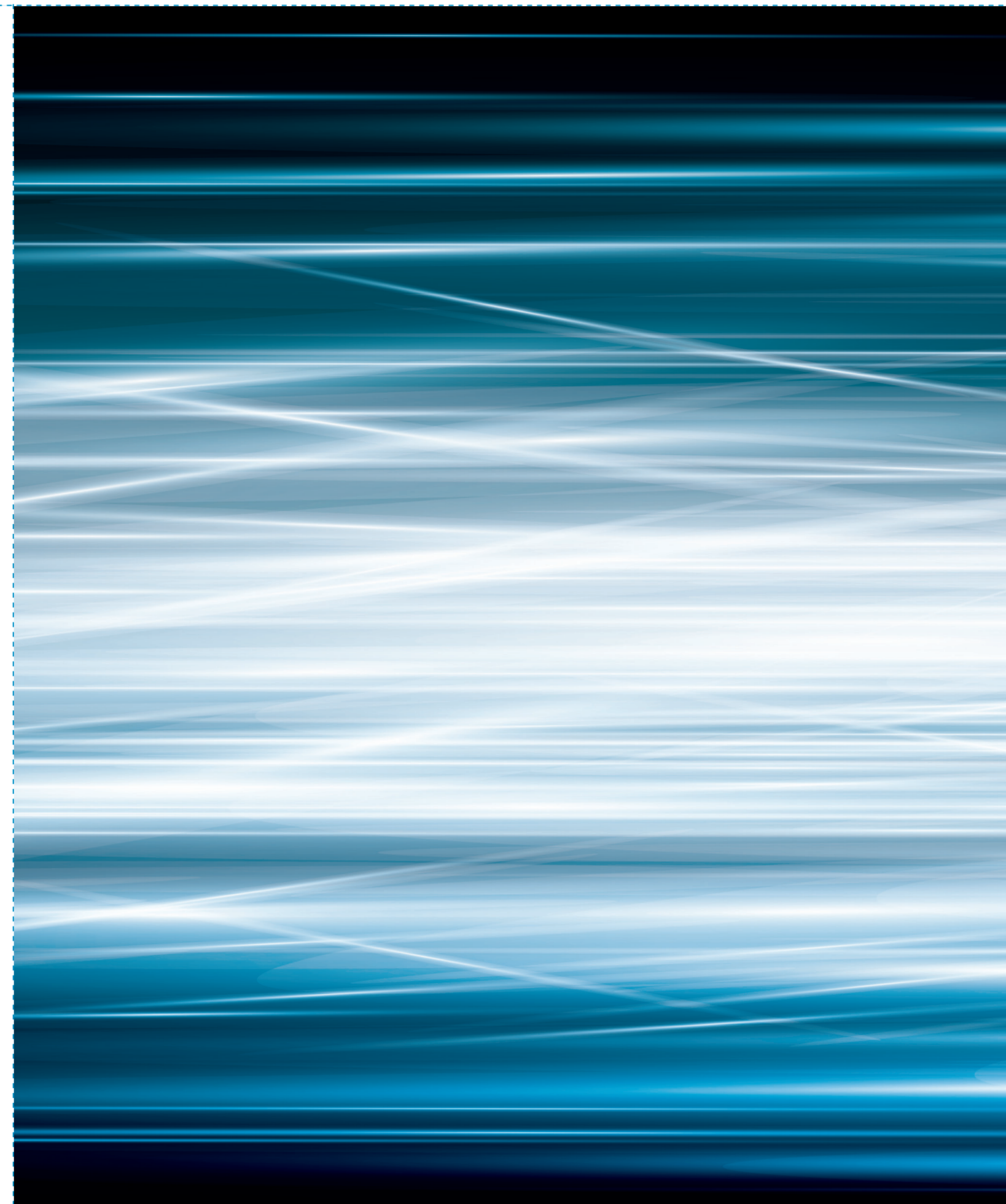
Recognising the need, within the energy industry, to optimise the integration of distributed energy sources, storage components and new consumer energy needs, e-GOTHAM proposes a new *open reference design and architecture and will develop a middleware with seamless connectivity* to optimise and manage microgrids in the residential, services and industrial sectors.

## MARKET innovation

e-GOTHAM is driven by the sustained increase in energy demand and intends to make an impact on the societal challenge of *Smart Buildings and Communities of the Future* through an open microgrid solution that contributes to sustainability and energy efficiency. Also, e-GOTHAM intends to achieve cross-sectoral re-usability of embedded systems and reduce the cost of system design, decrease development cycles and manage complexity with less effort. e-GOTHAM aims to create an ecosystem to attract those relevant stakeholders willing to elaborate on project results and thus generate new products and services.

## TECHNICAL innovation

e-GOTHAM will design an open reference architecture and develop a middleware with seamless connectivity that provides the communications and decision support tools needed to optimise and manage microgrids in the residential, services and industrial sectors. This will facilitate the integration and management of microgrid elements through a large-scale network of embedded systems that use measurements of energy related parameters to actuate dynamically and autonomously over the microgrid and so match power demand and supply. In addition, e-GOTHAM will emphasise the challenge of integrating and managing distributed energy production and storage components for sustainability in the energy sector. To verify and demonstrate the e-GOTHAM concept and objectives, the project will implement the middleware along with other project outcomes in an incremental and iterative manner.



<b>PROJECT COORDINATORS</b> Santiago Benito Gregorio	<b>START</b> April 2012
<b>INSTITUTION</b> Instalaciones Inabensa, S.A.	<b>DURATION</b> 36 months
<b>EMAIL</b> santiago.benito@inabensa.abengoa.com	<b>TOTAL INVESTMENT</b> €6,84 M
<b>WEBSITE</b> www-e-gotham.eu	<b>PARTICIPATING ORGANISATIONS</b> 17
	<b>NUMBER OF COUNTRIES</b> 5

**NORWAY**

**FINLAND**

**ESTONIA**

**SPAIN**

**ITALY**