Facilitate behavioral change to save energy:
the enCOMPASS project kicks-off

Como, November 10th and 11th 2016

Como, November 10th 2016 – Implement and validate an integrated socio-technical approach to behavioral change for energy saving, taking advantage of latest digital technologies: this is the goal of **enCOMPASS**, the project funded by the **EU Commission** under the **Horizon 2020** program, to be kicked-off in Como, Italy, on November 10th and 11th 2016. The project is coordinated by Professor **Piero Fraternali** from **Politecnico di Milano** and brings together **14 European partners from 7 countries** [(*)].

The 2015 United Nations Climate Change Conference (COP 21) set the need to limit climate change by keeping global warming increases within 2°C and reducing greenhouse gases by 60%. As achieving these ambitious targets requires major efforts from institutions, policy makers, businesses and citizens, enCOMPASS moves from the idea that pervasive technologies – such as smart metering, home automation, sensing and mobile devices – can enable the collective and individual change which is fundamental to activate sustainable behaviors and energy efficiency policies.

The project is expected to **reduce energy consumption (electricity and heating) and related CO2 emissions up to 20-25%**. The cost-effectiveness of the enCOMPASS system targets **returns on investment (ROI) in less than 2.5 years**, considering less than 1 year for schools, from 1 to 1.5 years for residential buildings, from 1 to 2.5 years for public buildings.

Through enCOMPASS, a **highly innovative ICT platform** will be developed to facilitate a newer and more effective approach to energy saving, leveraging data generated from smart sensors to feed user-friendly digital tools, and provide energy recommendations by applying advanced consumer behavior models. EnCOMPASS aims at blending existing partners' technologies and products to make energy consumption data easier to understand, simpler to use and funnier to explore for different types of stakeholders, including families, building and office managers, company employees, utilities and service providers.

Users will have a detailed view of energy data, with the possibility to read them by time (day, week, year), consumption source, context and activity class, triggering awareness of their own behaviors and environmental impact. Users will be warned when using too much energy, and receive recommendations upon their customized profile, current context and activity, adjusting best-fitting actions to save energy while retaining personal comfort levels. All participants will be encouraged through a game mechanism to perform suggested actions, and share their experience with peers to find alternative solutions to their energy needs, onboard new users and engage in a broader conversation around sustainable development.

In the next three years enCOMPASS will be piloted in three different climatic zones, Germany, Switzerland and Greece, considering three different type of buildings: residential houses, schools, public administration offices. All buildings will have a smart metering infrastructure and home automation sensors in place.

The enCOMPASS platform opens **a new business ecosystem** which features **novel business models based on behavioral change solutions**. The entire enCOMPASS architecture, including smart sensors, social computation interfaces, visualization and gamification techniques, context detection, personalized collaborative recommenders, behavior change apps and open interfaces, will be deployed in a cloud infrastructure to allow easy application development by third parties via Platform as a Service (PaaS) and Software as a Service (SaaS) models. This will streamline design, development and testing of additional services on top of enCOMPASS, making behavior change part of the next business strategies of utilities and service providers.

For further information about enCOMPASS, please visit http://www.enCOMPASS-project.eu

(*) Current enCOMPASS partners include:

1. Politecnico di Milano, Italy, acting as project coordinator
2. European Institute for Participatory Media, Germany
3. Stadtwerke Haßfurt GmbH, Germany
4. Naturschutzbund Deutschland, Germany
5. Watt + Volt, Greece
6. Società Elettrica Sopracenerina, Switzerland
7. Centre for Research and Technology Hellas, Greece
8. Ethniko Idryma Erevnon, Greece
9. Scuola Universitaria Professionale della Svizzera Italiana, Switzerland
10. Set Mobile S.R.L., Romania
11. Kaleidos Games, Italy
12. Kaunas University of Technology, Social responsibility research centre, Lithuania
13. Paradox Engineering SA, Switzerland
14. Gravity R&D Zrt, Hungary

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