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| **Name of project** |
| PREMIO |
| **Location** |
| South of France (Provence-Alpes-Cote d’Azur region), France |
| **Time frame** |
| 5 year programme  Premio I (2008-2009) & Premio II (2010-2012) has been extended by 1 year |
| **Lead organisation** |
| Led by Capenergies  EDF Departments – ERDF, PACA EDF, EDF R&D |
| **Sponsor/source of funding** |
| Total Budget: €4.3million  50% Provence-Alpes-Cote d’Azur region, 20% ERDF, 30% other partners |
| **Distribution, retail or both** |
| Distribution and retail |
| **Mandatory or opt-in** |
| Opt-in |
| **Trial or roll-out** |
| Trial |
| **Brief overview of project** |
| PREMIO is a project aiming to address the increase in energy consumption with the following goals in the PACA region:   * To develop a dynamic demand-response capability at local level, i.e. Demand side participation & load shifting. * To integrate Distributed Generation and especially renewable energies. * To manage regional electrical energy using a wide range of local players. * To increase the flexibility of the power system including the integration of storage. * To increase awareness of energy consumption and promote a new energy culture which encourages energy efficiency. |
| **Customer type** |
| 36 units (households, schools, small shops, etc) equipped. 9% of the Lambesc city population. |
| **Technology used (high-level functionality)** |
| Technologies for load curtailment:   * Load shedding boxes for houses and apartments. * Load shedding modules for residential and small commercial buildings. * Dimming of LED based public lighting.   Electrical Storage technologies:   * Individual electric storage units coupled to PV panels.   Thermal Storage technologies:   * Hot water tanks coupled to heat pumps. * Solar heat pump coupled with hot water storage. * Thermal storage for industrial & commercial cooling applications.   Distributed Generation:   * Electricity generation unit with solar thermal storage. * Biogas storage for electricity generation. |
| **Means of interaction with customer** |
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| **Appliances targeted** |
| * Thermal loads at residential level: Heating, ventilation and air conditioning equipment (HVAC) and domestic hot water. * Electrical appliances, such as washers and dryers for load shifting purposes (Typically in businesses such as Laundries and Laundromats). |
| **Period and duration of interruptions (for direct load control)** |
| The Premio Control system optimizes the use of host-customers’ Distributed Resources:  Two types of load reduction services, ‘day-ahead’ or ‘day-of’, are offered to an  upstream operator   * Day-ahead’ service: one day prior to its implementation (17h00). * ‘Day-of’ service: the same day to its application (up to 5-10 min before). |
| **Level of load reduction (overall and peak)** |
| Between 0.42% and 0.69% of the maximum power that feeds Lambesc (21000 kW). |
| **Consumer Experience** |
| Customer acceptance will be monitored and assessed during the experimental  Phase of the project:   * A methodology for monitoring data communicated by the Upstream Operators (critical periods, requests) and by Distributed Resources (facility’s consumption, temperature and overrides) has been established. * Follow-up interviews with host-customers will be conducted to assess and understand the impact of remote control equipment in their homes. * Lambesc’s residents who do not participate directly in the project will also be surveyed to measure awareness and perception of the project. |