

Ministry of Defense – Modena Ducal Palace



Location	City of Modena, Emilia Romagna region, Italy
Beneficiary	Italian Ministry of Defense
National targets under the "20-20-20" initiative	The Italian government owns several historic buildings in Italy. This pilot project of the Ministry of Defense aims to encourage the Italian government to adopt energy efficiency measures in other historic buildings which belong to other public institutions.
eeef TA Contribution	EUR 340,000
Project development services financed by eeef	<ul style="list-style-type: none"> • Technical support in the project development phase, to perform the initial studies and energy audits on public buildings and street lighting infrastructure, defining the minimum energy and cost savings expected. • Legal advice to structure the public procurement process and set up the legal framework regarding the ESCO selection • Definition of a measurement and verification system to monitor the achieved savings during the project implementation phase
Timeframe for TA	Completed by December 2019
Description of the envisaged investment program	The project program is primarily addressed to support the energy retrofitting of the Ducal Palace of Modena, owned by the Italian government and currently used by the Ministry of Defense, allowing the building to be more sustainable both from an environmental and economic point of views. Through this project, it will be possible to reduce the building energy consumption and CO2 emissions by 60%-70%, as well as to improve thermal comfort for the building occupants. The planned measures are (i) upgrade of thermal systems with installation of climate control measures, new pipes for the distribution network and improvement of the existing ones and (ii) interventions on the building envelope, to reduce thermal losses via thermal insulation of the internal walls.
Investment required	Total project volume of EUR 8.1m, which comprises EUR 5.0m for thermal systems upgrade and EUR 3.1m for building renovation.
Expected results	<ul style="list-style-type: none"> • Energy savings to be achieved: <ul style="list-style-type: none"> - Upgrade thermal systems: 3,640 MWh - Building Upgrade: 2,427 MWh Total: 6,067 MWh • Greenhouse gas emissions reduced/avoided in total: 1,232 tCO₂ • Jobs created/sustained: 50 FTEs
eeef's support to the investment program	eeef targets to contribute to finance the investment program.