

Genoa KPIs

The Smart Energy City, as a core to the concept of the Smart City, provides its users with a liveable, affordable, climate-friendly and engaging environment that supports the needs and interests of its users and is based on a sustainable economy. The Smart Energy City is highly energy and resource efficient, and is increasingly powered by renewable energy sources; it relies on integrated and resilient resource systems, as well as insight-driven and innovative approaches to strategic planning. The application of information, communication and technology are commonly a means to meet these objectives.

KP1 Resource system integration

	Level 1	Level 2	Level 3	Level 4
Integrated energy planning	Development of an overall strategy to improve performance	Incorporates Reg. Masterplan, Urban Mob. Plan and Sust. Energy Action Plan	Genoa is currently enagenage in updating of planning measures	
Development of ICT use	Large scale smart meter project was undertaken in 2000-2005 for all customers in Genoa	Genoa territory is served 95-98% by ADSL	Genoa has good wifi network covering 17000 subscribers	
Use of ICT tools in city planning and mgmt.	Designed a dashboard used by the Planning and Programming division	Apoint a traffic supervisor and dev. a Civil protection planning project	Developed an energy database	
Waste (integration with resource systems)	Aim at drawing up and realise a waste management action plan	Specific actions are considered about recycling		
Transportation (integration with energy systems)	Not many opportunities to enlarge network	Modal shift to public transportation due to the Urban Mobility Plan		

KPI2 Access to energy services

	Level 1	Level 2	Level 3	Level 4
Access to affordable energy services	The cost of electricity does not exceed 10% of famliy income	Heating in winter may be expensive for some but no programme to address this		
Level of energy services provided	All Genoa households have smart meters			

KP3 Resilience

	Level 1	Level 2	Level 3	Level 4
generation	for self-sufficiency distributed	for monitoring progress	controls data on building	
Energy price shock	Not considered an issue so no programmes adopted			

KP4 Energy efficiency

	Level 1	Level 2	Level 3	Level 4
Reduction of energy use	Signed Covenant of Mayors in 2009	Developed a Sustainable Energy Action Plan	Energy effeieincy goals included in the SEAP	
Increasing efficiency of distribution networks	Developing a strategy for implementation of best practice technologies	and Implementation of management and control systems		
Increasing efficiency in the suply system	Developing specific actions aimed to increase energy efficiency in the supply system	Implementeing DSM and developing progress in PP, CHP and CCHP technologies		
Increasing end-use energy efficiency	Developing initiatives on end use energy efficiency	as part of SEAP		
Reduction in primary energy demand	Developing initiatives on energy demand reduction	as part of SEAP		

KPI5 Renewable energy

	Level 1	Level 2	Level 3	Level 4
Production of electricity and heat from RES	Production of RES is part of SEAP	Developing actions to increase RES to >20% in 2020		
Level of public and private investment in developing RES	Public and private investment in RES is part of SEAP	Developing actions to encourage public and private investments		
Penetration of RE in the city's energy portfolio	Genoa is working on increasing the flexibility of the grid	Increased flexibility will enable RES/DER integration and stabilise the grid	Implementation of storage systems will also speed up RES penetration	
GHG emissions caused by energy production & transportation	The target in SEAP is to reduce GHG emissions by 23.7% in 2020	Genoa is implementing a strategy to achieve the target	Genoa has set up a monitoring programme in 2011 to monitor progress	

KPI6 Active users

	Level 1	Level 2	Level 3	Level 4
Smart City - reflective behaviour	Development of an internal governance of the Association	Advertisement campaigns, participation to events and		
Awareness of the city's Smart energy vision	Developed a communication plan	A strategy on awareness by citizens is planned		
Formal & informal hubs and innovation centers	Technology is being supported through Technological Districts	Social activities through Palazzo Verde	Research activities through Erzelli Pole of technology	
Self-sufficiency by users	The target is to get 20% of citizens involved in involvement processes	The target is to get 10% of businesses involved in involvement processes.		
Engagement from users	Sevelar initiatives have been boosted to increase inclusion of users	ie GAS Solidar Buying Groups, Living lab of the Project Periphèria	The general agreements of the Associates to be updated	
Investment	Genoa has made a strategy to encourage investments	It is the biggest goal of the Association		

KPI7 Sustainable economy

	Level 1	Level 2	Level 3	Level 4
Investment in innovation (public & private)	Companies can be member of AGSC by signing an MoU	Members have to present a free feasibility study		
Availability and prevalence of green jobs in the city	The objective of AGSC is related to creation of green jobs - indirectly	A new industrial cluster has opened addressing innovative companies		
Green initiatives	Few greenfield project in the near future	The focus is on brownfield development		

KPI8 Smart Governance

	Level 1	Level 2	Level 3	Level 4
Local stakeholders involved in investment and maintenance	The main objective of AGSC is to involve public	and private participation		
Governance	AGSC has the ambitious goal to become the control room	for cross departmental management		
e-Governance	Has started an initiative around territorial marketing	It foresees involved of citizens (CityLogo)		
Standards for data collection and analysis	Genoa is implementing a database in connection with the SEAP	It includes a GIS database "Banca Dati Energia".	It includes data on en. prod., transformation and end use activities	
Government engagement with users				