

INTERREG Alpine Space

**“e-mobility SMART grid for passengers and last mile freight
transports in the Alpine Space – e-SMART”**

Best Practice Template

June 2021

Best Practice

1. General Information		
Title of the practice	EV Charging Hubs	
Please select the project acronym	INCIT-EV	
Specific objective	Scalable charging hub based on a smart microgrid including a wide choice of DC charging stations powered by the tramway network	
Main institution involved	POLITO	
Location of the practice	Country	Turin
	Region/City	Italy

2. Detailed Description	
Detailed information on the practice	The main objective of UC4 is to set up a charging hub in a park-and-ride facility located in the southern outskirts of Turin. The goal of this practice is to offer two different types of DC charging infrastructure to the potential customers: 10 CCS2 low power DC-DC charging points and 1 150kW DC-DC Ultrafast charger. The low power chargers will be bidirectional, so in case of low power conditions they will be able to provide additional power to the ultrafast charger. The native DC-DC configuration is made possible by the power source of the whole installation, and that is a DC conversion substation that powers the city's tramway transport service. This innovative configuration guarantees a synergy between the city of Turin, the LPT company (GTT) and the eventual CPO (Iren), as well as the technology partners (Polito and Prima Electro).
Timescale (start/end date)	01/2020 – 12/2023
Evidence of success (results achieved)	Still no results to this point, testing should begin mid-2022.
Difficulties encountered/ lessons learned	Preliminary difficulties concerning equipment and materials because of the electric components supply chain shortages, as complained by the participants of the ongoing electric works tender.
Potential for learning or transfer	UC4 has a high replication potential in context with a stable and powerful tramway network. Further information regarding its

	replication potential may be provided after the first successful installation in Turin's Use Case.
Further information	https://www.incit-ev.eu/demonstrations/
Contact details <i>[Technical: the contact details will be visible only to "Project SMT members"]</i>	
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