

## ABOUT THE PROJECT

- EVGA- project aims for arctic operability for electric vehicles and related infrastructure.
- We will develop and demonstrate electric vehicles smart charging systems, intelligent testing solutions and digital environment for retail services.
- In the far north Finland, taking extreme and harsh conditions into consideration is crucial for all engineering projects.
- When a product or service is designed and tested to withstand the frigid temperatures, it will perform in any operating conditions.



## KEY RESEARCH QUESTIONS

- How arctic conditions impact on operability of electric vehicles and charging infrastructure?
- What kind of new services are needed for electric vehicles retail channel in future?
- How to guarantee operability when using electric vehicles in harsh and difficult driving conditions?
- What kind of new services and technology are needed for electric vehicle professional testing?



## CONTACTS

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## THE OBJECTIVES

- Develop and implement an arctic testing environment, including latest wireless data transfer technologies.
- Develop new smart charging concepts for electric vehicles.
- Map and commercialize new testing services and solutions for the electric vehicles.
- Develop a digital and virtual environment for electric vehicles pre-sales and introduction.
- Start the cooperation with Arctic Innovations Research Center concept.
- Establish international cooperation and business with European SME companies and research partners e.g. Horizon2020 program.



## THE EXPECTED RESULTS

- Rugged in-vehicle computer solution for electric vehicles testing.
- Wireless telecommunication LTE800 platform for secure and real time data transfer.
- Smart and mobile concepts and products for CSS/Combo charging standard.
- Wireless Road Side Unit communicating nodes; providing to vehicle important information, such as safety warnings and weather information.
- Digital and virtual environment for electric vehicles pre-sales and introduction.
- Centria's research and development cooperating with Arctic Innovations Research Center.