RURACTIVE OPEN CALL - CHALLENGE 28

Title of the challenge	**A sustainable and inclusive carpooling solution**
Dynamo (pilot location)	Gotland, Sweden
RDD (Rural Development Driver) *addressed by the challenge*	Sustainable multimodal mobility
Overall context description and specific context to be addressed by the challenge	Gotland is an island and covers a total area of approximately 3,140 square kilometres. Gotland has a relatively sparsely populated countryside with small villages and farms. The majority of the island's, approximately 60,000 inhabitants, live in or around Visby, while the remaining 35,000 live outside of Visby. On Gotland there are over 1,000 different associations - everything from sports clubs and cultural associations to nature conservation organizations and local interest groups. There are estimated 4,000-5,000 different workplaces. Private cars are often used very in-efficiently, e.g. with everyone taking their own car instead of sharing a car with someone going to the same destination. This occurs at the same time as there are many people who are limited in their travel needs, e.g. because of lack of public transportation and possibility to drive a car of their own (this is especially common in rural areas and among youths and older people). On Gotland, it is very common for each parent to drive their child to extracurricular activities by car. The problem is that typically only one child is in each car, even though there is space for more, and there may even be others to pick up along the same route to the activity. The same situation applies to commuting to and from work. Even when people start and finish at the same time and at the same workplace, they still drive alone in their own car. This is a deeply ingrained behaviour, and it iss likely that the incentives, logistics, and simplicity of carpooling have not been strong enough for most people to choose that option. The desire to maintain flexibility with one's own schedule is probably also a contributing factor.

Scope of the Challenge	The purpose of the carpooling app is to encourage people to carpool more, thereby reducing the number of cars on the road and lowering fossil fuel emissions, as well as creating new, more affordable travel alternatives. The goal is to develop a model that creates incentives for carpooling while offering a simple and fair financial solution for the driver. These financial or non-financial incentives could include time and monetary savings when sharing responsibility within a team when driving kids to sport or other activities, as well as rewards for less emissions. The app can be targeted at all residents of Gotland, with a primary focus on sports clubs and work commutes.
Solution requirements	An application for web and mobile phone with options for simple and secure registration via Mobile BankID, integration with a Google account or similar verification method, as well as a connection to the Swish payment solution, and to several types of calendars. The app should be including official European languages, including Swedish. The app should also allow to choose and switch between different car-pooling groups within the app, e.g. a person can have one group for their sports association and one for their work commuters. Ideally: • The app automatically suggests options that are more efficient in terms of carbon emissions • The algorithm suggests different way of pay-back the drivers, not financial solution would be more than welcome The solution should be easy to use and intuitive, low-cost, ensure open access, and utilise open data sources.
Specific objectives and expected outcomes	A user-friendly and inviting app that easily facilitates carpooling and highlights the economic and environmental impact of each completed shared trip. It will provide a monthly and yearly summary of the savings achieved through active choices, including personal financial gains, environmental benefits such as reduced emissions, and contributions to society (e.g. reduced road wear). Importantly, the app can contribute to climate change mitigation by counting and presenting to the users the reduction in carbon footprint for

	each shared ride. By encouraging fewer individual car trips, it will contribute to optimising transportation resources, thereby achieving greater energy efficiency in Gotland.
Available resources	• Uppsala University's technical and knowledge expertise (e.g. research support) • Local energy companies with experience in sustainable projects (e.g. collaborations for technical guidance and practical knowledge). • Existing renewable energy infrastructure (i.e. existing energy data, etc.) • Voluntary communities (these can help with public engagement to increase local participation in energy initiatives)