



# LIFE GreenYourRoute A European innovative logistic platform for last mile delivery of goods in urban environment

Dr Georgios K.D. Saharidis Assistant Proffesor Department of Mechanical Engineering University of Thessaly Greece





















# GreenYourRoute

### Consortium

- University of Thessaly (Coordinator and developer);
- MILITOS (Marketing and dissemination actions);
- CHAPS (Developer of UI);
- CEDA (Demonstrator in Czech Republic, developer, reseller);
- > ITACA (Demonstrator in Italy, reseller);
- ATHINAIKI (Demonstrator in Greece);
- KOUKOUZELIS (Demonstrator in Greece;
- > PLUS (demonstrator in Greece).

## **Co-funded**

LIFE (http://ec.europa.eu/environment/life/) - the EU financial instrument for the environment

Duration: 42 months

Total budget: 2,191,237 Euro





# Objectives and scope

# Scope:

LIFE GreenYourRoute (LIFE GYR) is an innovative logistics platform for last mile delivery of goods in urban environments developed within a multidisciplinary approach of environmental engineering, computer science and operation research.

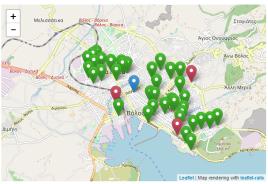
## **Objectives:**

- Reduce GHG and non-GHG emissions, by solving Green-VRPs;
- Demonstrate that environmental friendly routing is also cost-saving;
- Establish a sustainable GYR Company, also providing a GYR certificate;
- > Develop a significant network of customers for GYR Company in EU through regular dissemination activities and workshops;
- Systematically monitor the environmental impact of the 5 demonstrators in 3 different EU countries that participate in the project.





# GreenYourRoute



#### **Trucks**

#### New Truck

#### Description Capacity Use for routing

Mikro fortigo 150 €

Meseo fortigo 250 €

Megalo fortigo 400 €

Total trucks capacity
Capacity needed 342

Capacity type: Volume ▼

#### Get route

Mikro fortigo: user25 -> user40 -> user36 -> user35 -> user34 -> user33 -> user38 -> user37 -> user39 -> user28 -> user31 -> user29 -> user32 -> user30 -> user26 -> user23

Meseo fortigo: user1 -> user24 -> user22 -> user20 -> user4 -> user2 -> user21 -> user19 -> user17 -> user17 -> user11 -> user11 -> user10 -> user6 -> user7 -> user12 -> user13 -> user16 -> user9 -> user8 -> user5

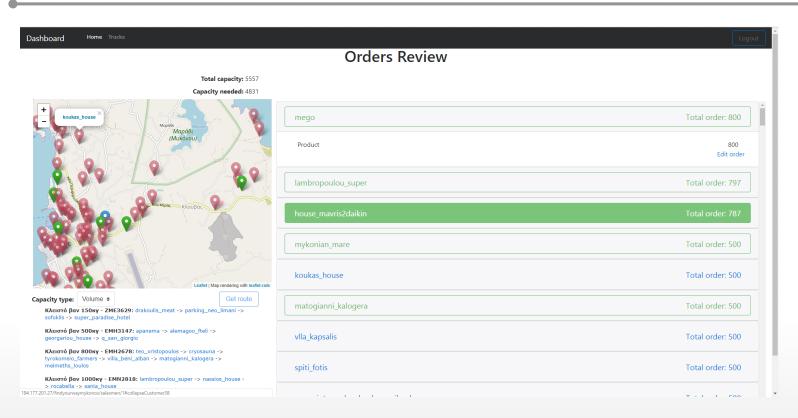
http://194.177.201.27/findyourwaysimple (41)







# GreenYourRoute



http://194.177.201.27/findyourwaymykonos (89691)





# **Expected impacts**

### > Environmental

- Reduced yearly GHG emissions;
- > Yearly emission savings of routing operations of 5 demonstrators equal to: 42.26tn NOx, 4.64tn of PM, 73.14tn of CO, 1.87tn of NH3, 8,885.7tn of CO2, 8.94tn of CH4, 10.57tn of VOC and 8.13tn of SO2;
- > At least 12 SMEs that adopt green procurement rules in their business environment.

### Socioeconomic

- LIFE GYR integration to at least 3 additional SMEs;
- GYR platform verification, development of GYR certificate;
- More than 900 representatives of SMEs and more than 3,000 individuals informed about the benefits of GYR platform;
- > Raise awareness of the fact that turning to green freight operations does not necessarily increase the cost of operations.





# Policy implications

### Goals:

Updating existing EU legislation with a directive for green vehicle routing planning.

#### **Contribution:**

- > Integration of approaches to the implementation of Air quality legislation by developing web and mobile apps for green vehicle routing of SMEs in urban regions;
- > Facilitation of compliance with Union air quality and related air emissions standards including the National Emissions Ceilings Directive by reducing the production of non-GHG and GHG emissions in urban regions;
- Assisting SMEs to turn environmental challenges into opportunities in accordance with the Small Business Act for Europe;
- Helping drivers to better organize their working time as specified in the Road Transport Working Time Directive;
- Optimal use of road, traffic and travel data according to the Directive 2010/40/EU regarding ITS applications and services in the field of road transport.





# GreenYourRoute a close to market project

## Actions carried out during the project to ensure continuation

- Establishment of GYR Company to continue operation after the project;
- Commitment of 5 demonstrators to purchase GYR service after the end of the project;
- Integration of GYR service to 3 additional SMEs before the end of the project;
- Replication and transfer of GYR platform to other types of SMEs (e.g. waste collection authorities, post offices etc.);
- > Green routing operators' certificate to GYR Company's customers.

## Means to support the above actions

- Verification plan for the European environmental technology verification (ETV) of GYR service;
- Replicability and transferability plan for the promotion of GYR service;
- Business plan for the operation of GYR Company;
- > Exploitation plan, aiming to maintain and ensure the achievement of the project results beyond the project lifetime across project countries, the EU and beyond;
- After-life communication plan, including activities for at least 3 years after the end of the project.





# Thank you for your attention! Visit our website:

www.greenyourroute.com