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Koukouzeli

plus



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

# Deliverable C3.2: Report focusing on the results achieved and/or deviations experienced/expected as compared to the original estimates/inputs in the KPI Webtool and LIFE performance Indicators

<u>Results Achieved</u>

Partner responsible for this report: UTH







Document Information Summary		
Action:	C3 Update and Monitoring of Key Project-level Indicators	
Sub-action:	Sub-action C3.1: Update of Key Project-level Indicators	
	Sub-action C3.2: Monitor and evaluation Key Project-level	
	Indicators	
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### Abbreviations

CH <sub>4</sub>	Methane
СО	Carbon Monoxide
$CO_2$	Carbon Dioxide
СР	Check Point
EASME	Executive Agency for Small and Medium-sized Enterprises
FC	Fuel Consumption
GYR	GreenYourRoute
KPI	Key Project-level Indicators
$N_2O$	Nitrous Oxide
NH <sub>3</sub>	Ammonia
NO <sub>x</sub>	Nitrogen Oxides
PM	Particulate Matter
SME	Small and medium-sized enterprise
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compounds







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### 1 Introduction

### 1.1 Action definition

The scope of *Action C3 Update and Monitoring of Key Project-level Indicators* is to monitor and evaluate the results and impact of the project. For this purpose, performance indicators for the project are provided in terms of environmental and socio-economic benefits. The project results are recorded in the KPI webtool of the Executive Agency for Small and Mediumsized Enterprises (EASME).

All project outcomes and outputs are not only linked to the relevant environmental, climate action and societal KPI, but also to the specific context which they (aim to) influence.

### **1.2** Description of each Sub-Action

Action C3 includes two sub-actions, namely Sub-Action C3.1 *Update of Key Project-level Indicators* and Sub-Action C3.2 *Monitor and evaluation Key Project-level Indicators*.

#### 1.2.1 Sub-Action C3.1 Update of Key Project-level Indicators

During this Sub-Action, LIFE GYR team in direct communication with the external monitoring team and following the instructions and guidelines provided by EASME/CINEA, updates the KPIs using the official KPI webtool. A comprehensive set of outcome indicators at programme level needed to report on the success of the programme in relation to the performance indicators defined in Article 3 Paragraph 3 of the LIFE Regulation is defined. A set of key indicators corresponding to the priority area "Environment and Resource Efficiency" and the sector "Air" on which LIFE GYR focusses, as well as on additional key indicators concerning the project's societal and economic outcomes as described in Action C2. Beyond these indicators, complementary key indicators are updated to measure and monitor the quantitative and qualitative impact of dissemination actions.

The LIFE KPI Webtool was updated, after assessing the actual Start values of indicators 6.1 Air – emissions and 8.1 Greenhouse gas emissions. The assessment of the actual start values for these indicators was based on the establishment of Checkpoint 1.1, under the frame of Action C1. Checkpoint 1.1 is defined as the time period before the integration of GYR platform in the demonstrators' environments which is simulated using the simulation tool developed in the frame of Action C3 and presented in Deliverable C3.1. This checkpoint served as the baseline scenario.

#### 1.2.2 Sub-action C3.2: Monitor and evaluation Key Project-level Indicators

In this sub-action, LIFE GYR team monitors updates the indicators at each reporting stage (submission of Progress, Mid-term and Final report) to provide and explain in narrative form results achieved in Deliverable C3.2 and/or deviations experienced/expected as compared to the original estimates/inputs in the KPI Webtool in Deliverable C3.3.





# 2 Indicator Context

### 2.1 C.1 Overarching context

In "Overarching context" the project team selected the overarching contexts which are relevant for its outcomes and outputs. The relevant overarching contexts for LIFE GYR were "C.1.2 Territorial extent" for defining the area of influence of the project with regard to its main environmental, climate action or related governance or information objectives (see Table 1) and "C.1.6 Project Fundings", to clarify which part of their impact comes from LIFE funding and which from complementary funding. LIFE funding was only relevant for C1.6, since LIFE GYR is not an integrated project.

Tuble 1. Territorial extents			
<b>Territorial extent</b>	Nomenclature		
Greece	EL		
Czech Republic	CZ		
Italy	IT		

Table 1. Territorial extents

### 2.2 C.2 Specific context

In "Specific context" the project team selects from Section "Overarching context" one or more overarching contexts that, alone or jointly, are particularly relevant for one or more indicator descriptors. The indicator descriptors and the related values that the project estimates, measures/models, or forecasts are linked to the relevant specific context.

The project team defined the specific contexts presented in Table 2 to create a meaningful link between them and the indicator descriptors and related values.

Specific context name	<b>Overarching contexts</b>
Czech Republic, Greece, Italy	IT EL CZ
GREECE	EL
CZECH REPUBLIC	CZ
ITALY	IT

Table 2: LIFE GYR	Specific	context	definition
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The specific contexts Czech Republic, Greece and Italy were grouped in one Specific context "Countries involved in the project implementation», including overarching contexts CZ, EL and IT.







### **3** Project Specific Settings and Indicator Selection

### D. Project setting, area/length and population

#### 1.5. Project area/length

The project area includes Czech Republic, Greece and Italy. The indicator selected was Area environmental/climate implementation actions (e.g. development, of testing, demonstration, application of best practices/innovations) and the activities included was the freight transportation of the participating company (GR: ATHINAKI, PLUS KOUKOUZELIS, DIGICOM, YOUTRADESMART, DASCO S.A., CZ: DS Logistic s.r.o. and IT: GLS Company).

In Italy, ITACA's demonstrator performs logistics operations in the area of Cosenza. According to Wikipedia, the province of Cosenza covers **6,710 km**<sup>2</sup>.

In Czech Republic, CEDA's demonstrator performs logistics operations in the greater area of Czech Republic. According to Wikipedia, the area of Czech Republic covers 78,866 km<sup>2</sup>. Due to the wide range of logistics activities of CEDA's demonstrator it is assumed that at least half of Czech Republic's extent is influenced by the project actions, i.e. **39,433 km<sup>2</sup>**.

In Greece, all Greek operators (i.e. associated beneficiaries and new customers of GYR service) perform logistics operations in the area of Region of Attica. ATHINAIKI, also performs logistics operations in Thessaloniki, Larissa, Lamia, Patra, Ioannina and Rhodes and DIGICOM also in the region of central Macedonia, the region of eastern Macedonia and Thrace, Volos and Crete. The total extent of the Greek areas influenced by the project activities covers **68,791 km<sup>2</sup>** (see Table 3).

Area	Extent
Region of Attica	3,808
Thessaloniki	3,681
Larissa	5,387
Ioannina	5,000
Lamia	4,440
Patra	3,272
Rhodes	1,401
Region of central Macedonia	18,810
Region of eastern Macedonia and Thrace	14,157
Volos	385
Crete	8,450
Total	68,791

 Table 3: Extent of Greek areas influenced by the project activities

The total spatial extent of the project expected to be directly influenced by the project actions covers **114,934 km**<sup>2</sup>. Note that this value is valid both for the end of the project and 3 years







after the end of the project assuming that, the new customer of GYR service will run their business at the same regions where the existing customer run their own business.

#### Warning gotten by the KPIs web tool

We got the following WARNINGS when the Check KPI Values Ranges was performed:

Italy: The impact of an average LIFE project for the indicator ("1.5. Project area/length - Conservation or improvement of the status of an area or segment"), calculated as "Project End - Project Start" and measured in "km2", is expected to be in the following range: 0 km2 <= Project End - Project Start <= 977.92 km2. In the frame of LIFE GYR project, the value of this indicator is much higher than the average as the vehicles travel within the entire area of cities where the LIFE GYR service was demonstrated.

Czech Republic: The impact of an average LIFE project for the indicator ("1.5. Project area/length - Conservation or improvement of the status of an area or segment"), calculated as "Project End - Project Start" and measured in "km2", is expected to be in the following range: 0 km2 <= Project End - Project Start <= 977.92 km2. In the frame of LIFE GYR project, the value of this indicator is much higher than the average as the vehicles travel within the entire area of cities where the LIFE GYR service was demonstrated.

Greece: The impact of an average LIFE project for the indicator ("1.5. Project area/length - Conservation or improvement of the status of an area or segment"), calculated as "Project End - Project Start" and measured in "km2", is expected to be in the following range: 0 km2 <= Project End - Project Start <= 977.92 km2. In the frame of LIFE GYR project, the value of this indicator is much higher than the average as the vehicles travel within the entire area of cities where the LIFE GYR service was demonstrated.

Italy, Czech Republic and GreeceThe impact of an average LIFE project for the indicator ("1.5. Project area/length - Partial reduction of specific pressures/threats affecting the spatial extent of the project in comparison to the present level"), calculated as "Project End - Project Start" and measured in "km2", is expected to be in the following range: 0 km2 <= Project End - Project Start <= 977.92 km2. In the frame of LIFE GYR project, the value of this indicator is much higher than the average as the vehicles travel within the entire area of cities where the LIFE GYR service was demonstrated.

#### 1.6. Humans (to be) influenced by the project

The project area includes regions of Czech Republic, Greece and Italy. The humans influenced by the project are monitored through four descriptors:

a) Persons whose lives were directly, positively impacted by MAIN envir. actions of project. This descriptor is assessed through the inhabitants of the areas where the project is implemented.

b) Persons with improved capacity or knowledge due to project actions. This descriptor is assessed through the persons participating to workshops and webinars and they were explained that adopting a green logistics technologies such as LIFE GreenYourRoute platform does not only improves the environmental impact of their operations but at the same time results in important cost saving (i.e. fewer kilometers travelled and faster deliveries).





c) Persons who may have been influenced via dissemination or awareness raising projectactions (reaching). This descriptor is assessed through the persons participating to bilateral meetings between an SME and GYR team resulting in some cases the purchase of GYR service by the SME and persons participating to events.

d) Persons who changed their behaviour or practices due to the project actions. This descriptor is assessed through the persons adopting Green Procurement rules within GYR Consortium and trained on how to use GYR apps.

#### Number of residents within or near the project area Greece

All Greek demonstrators perform logistics operations in the region of Attica and ATHINAIKI also performs operations in Thessaloniki, Larissa, Lamia, Patra, Ioannina and Rhodes; according to Wikipedia, the population of these cities is summarized in Table 4.

Area	Population
Region of Attica	3,756,000
Thessaloniki	1,106,000
Larissa	281,713
Ioannina	167,407
Lamia	52,006
Patra	167,446
Rhodes	115,490
Region of central Macedonia	1,792,069
Region of eastern Macedonia and Thrace	562,069
Volos	85,303
Crete	624,408
Total	5,646,062

Table 4: Population in Greek cities influenced by the project activities

#### Czech Republic

CEDA's demonstrator performs logistics operations in the greater area of Czech Republic. According to Wikipedia the average total population of Czech Republic in 2023 was expected (based on 2021 census) to be 10,827,529 inhabitants. Due to the wide range of logistics activities of CEDA's demonstrator it is assumed that at least half of Czech Republic's extent is influenced by the end of the project **5,413,764** inhabitants.

Italy

ITACA performs logistics operations in the area of Cosenza and more specifically in the cities Cosenza, Rende and Castrolibero. According to City Population application the total population of Cosenza is estimated to 106,801 inhabitants (see <u>link</u>), of Castrolibero to 7,228







inhabitants (see <u>link</u>) and of Rende to 25,281 (see <u>link</u>) in 2023, summing up to 138,310 inhabitants (see Table 5).

Area	Population
Cosenza	106,801
Rende	25,281
Castrolibero	7,228
Total	112,317

Table 5: Population in the Italian cities influenced by the project activities

The residents living in the project area in which the pressures (in this case the air pollution) are to be partially reduced are **11,172,143** inhabitants.

The above values are not expected to differentiate significantly 3 years after the end of the project as the population will be similar.

Note that these values are valid assuming that the new customers of GYR service will run their business at the same regions where the existing customer run their own business. In case the new customers are located in different regions then the beyond 3 years value will be higher.

#### Persons with improved capacity or knowledge due to project actions

This descriptor included 2 groups of persons:

1) The persons participated in the workshops (physically or virtually) (202 persons).

2) The persons participated in the webinars (30 persons).

In total 232 persons at the end of the project.

For this descriptor, capacity building for persons/professionals in the logistics sector means to understand that adopting a green logistics technologies such as LIFE GreenYourRoute platform does not only improves the environmental impact of their operations but at the same time results in important cost saving (i.e. fewer kilometers travelled and faster deliveries). This was demonstrated during workshops and webinars throughout the real examples of existing users of GYR service.

We estimate that 3 years after the end of the project additional 60 persons (i.e. 20 per year) will get involved into the after the end of the project activities (i.e. webinars organized by GYR Company for 3LP companies in order to train new users on how to use GYR service).

The value of the indicator Beyond 3 year is equal to 292 individuals.







# Persons who may have been influenced via dissemination or awareness raising project actions (reaching).

This indicator included 2 groups of persons:

1) The persons participated to meetings organized in the frame of the project GYR project with SMEs. The purpose of these meetings was the presentation of the outcomes (i.e. the GYR apps) of the project and the socio-economic and environmental impact resulted by the use of the GYR service. These meetings investigated also a potential collaboration between GYR Company and the SME (i.e. purchase GYR service or replicate/extend the outcomes of GYR service) (182 persons).

2) The persons participating to the events where GYR project participated (i.e. Event "LIFE and SMEs" held in Athens) (326 persons).

In total, these persons are 508 at the end of the project.

We estimate that 3 years after the end of the project additional 150 persons (i.e. 50 per year) will get involved into the after the end of the project activities (i.e. promotional events of GYR service, conference and workshops participation etc.).

The value of the indicator Beyond 3 year is equal to 658 individuals.

#### Persons who changed their behaviour due to project actions

This indicator was added after amendment requested by CINEA/EASME in October 2020. It reflects the number of persons within the project beneficiaries' consortium, who became aware of the project's results and change the daily routing planning approach by adopting GYR service.

At the end of the project

- 59 Individuals adopting Green Procurement rules within GYR Consortium persons (see indicator B.1.4 in Deliverable C2).
- 179 Trained users familiar to the web and mobile applications persons (see indicator B.4.1 in Deliverable C2).

The total number of persons is equal to 238.

3 years after the end of the project

Based on the business plan present in Deliverable B6.1., 63 SMEs will become customer of GYR service 3 year after the end of the project. In the frame of the project, 8 SMEs are customers of GYR service influencing the behavior of 179 persons (22 persons per entity). In case 63 SMEs become customers of GYR service, we estimate the persons which will change their behavior (i.e. their daily routing planning approach) by adopting GYR service are expected to be **1386**.

In total, the value of this descriptor 3 years after the end of the project is equal to 1624.







A list of the stakeholders and the persons participating to meeting with SMEs, workshops, webinars and dissemination activities is presented in the following table.

#### Table 6: Stakeholders contacted under the frame of LIFE GYR

Stakeholders involved	People
1. Meeting with company TOI TOI (HELLAS) S.A. for possible collaboration, Athens	5
2. Meeting with the director of cleaning Department of the Municipality of Vrillissia for discussion for future collaboration and use of GYR platform, Athens	3
3. Meeting with the Mayor of Larisa for presentation of the GYR platform and discussion for possibility of using it for the garbage collection planning of the Municipality, Larissa	3
4. Presentation of GYR Project   Online Event "LIFE and SMEs" UTH/MILITOS CYPRUS	20
5. Europe Direct Contact Centre - EU Policy updates	5
6. Eco-Management and Audit Scheme (EMAS) - EU Policy updates	5
7. Centre for Research and Technology Hellas (CERTH)/ Hellenic Institute of Transport (HIT) – dissemination of the outcomes of the project and potential collaboration	10
8. CSR Hellas – possible business collaboration for VRP planning	5
9. Hellenic Accreditation System – possible business collaboration for emission calculations	5
10. Ministry of Transport and Infrastructure Trikala) – possible business collaboration for VRP planning of waste collection trucks	6
11. Ministry of Environment Energy and Climatic Change	4
12. KEDE (Central Union of Municipalities of Greece) – possible business collaboration for VRP planning of waste collection trucks	50
13. SVAP - possible business collaboration for VRP planning	4
14. Region of Attica – possible business collaboration for VRP planning of waste collection trucks	4
15. Region of Macedonia– possible business collaboration for VRP planning of waste collection trucks	4
16. Region of Ioanian Islands – possible business collaboration for VRP planning of waste collection trucks	3
17. Municipality of Andros – possible business collaboration for VRP planning of waste collection trucks	3
18. Municipality of Sifnos – possible business collaboration for VRP planning of waste collection trucks	3
19. Municipality of Athens – possible business collaboration for VRP planning of waste collection trucks	9
20. Municipality of Ag. Anargyroi – possible business collaboration for VRP planning of waste collection trucks	7
21. Municipality of Pirgos – possible business collaboration for VRP planning of waste collection trucks	4
22. KLU University - dissemination of the outcomes of the project and potential collaboration	4
23. IMET / Hellenic Institute of Transport (HIT) - dissemination of the outcomes of the project and potential collaboration	7
24. Goldair Cargo - possible business collaboration for VRP planning	4







Stakeholders involved	People
25. Jungheinrich – possible business collaboration for VRP planning	3
26. Iliadis Transport - possible business collaboration for VRP planning	2
27. Vectra International - possible business collaboration for VRP planning	1
28. Sani Import/Export - possible business collaboration for VRP planning	1
29. SpeedCourier – possible business collaboration for VRP planning	5
30. EEL (Ελληνική Εταιρεία Logistics) ) - dissemination of the outcomes of the project and potential collaboration	4
31. Greek Cold Storage & Logistics Association ) - dissemination of the outcomes of the project and potential collaboration	4
32. TLN Netherlands - dissemination of the outcomes of the project and potential collaboration	5
33-185. GYR Workshops in Greece, Czech Republic and Italy - dissemination of the outcomes of the project and potential collaboration	202
186-209. GYR webinars - dissemination of the outcomes of the project and potential collaboration	30
210-322. GYR participation in other networking activities (i.e. ESCC conferences) - dissemination of the outcomes of the project and potential collaboration	306
Total number of stakeholders 322	Total number of persons 740

#### Warning gotten by the KPIs web tool

We got the following WARNING when the Check KPI Values Ranges was performed:

The impact of an average LIFE project for the indicator ("1.6. Humans (to be) influenced by the project - Persons whose lives were directly, positively impacted by MAIN envir. actions of project - see Guide"), calculated as "Project End - Project Start" and measured in "Number of residents within or near the project area", is expected to be in the following range: 0 Number of residents within or near the project area <= Project End - Project Start <= 519,599.12 Number of residents within or near the project area the project area. In the frame of LIFE GYR project, the value of this indicator is much higher than the average as the vehicles travel within the entire area of cities where the LIFE GYR service was demonstrated.

#### E. Environmental and Climate action outputs and outcomes

#### 6.1. Air emissions (non-GHG emissions)

According to the calculations performed during the assessment of CP1.1 (i.e. 1<sup>st</sup> Check Point of the C1 Action) and CP1.2 (i.e. 2<sup>nd</sup> Check Point of the C1 Action) under the frame of Action C1, the produced non-GHG emissions from the project demonstration are presented in the following tables.

Table 7: Calculated non-GHG emissions of the project's demonstrators and new customers in Greece

Greek Users		
ATHINAIKI	CP1.2	CP1.1





FC (Tones)	137.024	276.012
CO (Kilograms)	978.502	1,908.724
NH3 (Kilograms)	4.029	8.121
NOx (Tones)	4.331	8.546
PM (Kilograms)	71.875	139.427
VOC (Kilograms)	201.259	387.445
SO2 (Kilograms)	8.907	17.941
DIGICOM	CP1.2	CP1.1
FC (Tones)	263.561	545.239
CO (Kilograms)	1871.444	3749.150
NH3 (Kilograms)	7.783	16.113
NOx (Tones)	8.317	16.858
PM (Kilograms)	137.627	274.185
VOC (Kilograms)	387.919	766.958
SO2 (Kilograms)	16.892	34.946
YOUTRADESMART	CP1.2	CP1.1
FC (Tones)	193.435	354.405
CO (Kilograms)	1373.509	2436.948
NH3 (Kilograms)	5.712	10.473
NOx (Tones)	6.104	10.957
PM (Kilograms)	101.008	178.220
VOC (Kilograms)	284.706	498.523
SO2 (Kilograms)	12.398	22.715
DASCO S.A.	CP1.2	CP1.1
FC (Tones)	211.135	401.453
CO (Kilograms)	1355.189	2624.532
NH3 (Kilograms)	6.199	11.829
NOx (Tones)	6.655	12.405
PM (Kilograms)	109.692	201.367
VOC (Kilograms)	309.622	563.670
SO2 (Kilograms)	13.510	25.709
Total in Greece	CP1.2	CP1.1
FC (Tones)	805.157	1,577.111
CO (Kilograms)	5,578.646	10,719.355
NH3 (Kilograms)	23.725	46.537
NOx (Tones)	25.408	48.768
PM (Kilograms)	420.204	793.200
VOC (Kilograms)	1,183.508	2,216.597
SO2 (Kilograms)	51.708	101.313

# Table 8: Calculated non-GHG emissions of the project's demonstrators and new customers in Czech Republic

in Czech Republic CP1.2 CP1.1
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CEDA/Total in Czech Republic	CP1.2	CP1.1
FC (Tones)	728.596	1495.320
CO (Kilograms)	3338.832	6959.486
NH3 (Kilograms)	7.776	15.960
NOx (Tones)	13.979	29.139
PM (Kilograms)	99.397	207.234
VOC (Kilograms)	133.604	273.401
SO2 (Kilograms)	47.358	97.195

Table 9: Calculated non-GHG emissions of the project's demonstrators and new customers in Italy

ITACA/Total in Italy	CP1.2	CP1.1
FC (Tones)	32.653	65.223
CO (Kilograms)	9533.684	19043.176
NH3 (Kilograms)	0.747	1.493
NOx (Tones)	0.596	1.190
PM (Kilograms)	0.830	1.658
VOC (Kilograms)	840.538	1678.943
SO2 (Kilograms)	2.122	4.239

Based on the data presented above, and the real life practice period for each user of GYR platform (i.e. 17 months for ATHINAKI, CEDA and ITACA and 7 months for DIGICOM, YOUTRADESMART and DASCO S.A.) the average indicators are calculated and presented in the following tables.

Table 10: Calculated non-	-GHG indicators of th	e project's demonstr	ators and new	customers in Greece
		1 )		

ATHINAIKI	CP1.2	CP1.1
FC (Tones/year)	96.723	194.832
CO (Kilograms/day)	2.878	5.614
NH3 (Kilograms/day)	0.012	0.024
NOx (Tones/year)	3.057	6.033
PM (Kilograms/day)	0.211	0.410
VOC (Kilograms/day)	0.592	1.140
SO2 (Kilograms/day)	0.026	0.053
DIGICOM	CP1.2	CP1.1
FC (Tones/year)	451.819	934.6965936
CO (Kilograms/day)	13.367	26.77964941
NH3 (Kilograms/day)	0.0555	0.115093761
NOx (Tones/year)	14.259	28.90014814
PM (Kilograms/day)	0.983	1.958468353
VOC (Kilograms/day)	2.770	5.478276212
SO2 (Kilograms/day)	0.120	0.249619852
YOUTRADESMART	CP1.2	CP1.1







FC (Tones/year)	331.603	607.552
CO (Kilograms/day)	9.810	17.406
NH3 (Kilograms/day)	0.040	0.074
NOx (Tones/year)	10.465	18.785
PM (Kilograms/day)	0.721	1.273
VOC (Kilograms/day)	2.033	3.560
SO2 (Kilograms/day)	0.088	0.162
DASCO S.A.	CP1.2	CP1.1
FC (Tones/year)	361.946	688.205
CO (Kilograms/day)	9.679	18.746
NH3 (Kilograms/day)	0.044	0.084
NOx (Tones/year)	11.408	21.265
PM (Kilograms/day)	0.783	1.438
VOC (Kilograms/day)	2.211	4.026
SO2 (Kilograms/day)	0.096	0.183
Total in Greece	CP1.2	CP1.1
FC (Tones/year)	1,242.093	2,425.287
CO (Kilograms/day)	35.736	68.547
NH3 (Kilograms/day)	0.153	0.298
NOx (Tones/year)	39.190	74.984
PM (Kilograms/day)	2.699	5.080
VOC (Kilograms/day)	7.608	14.205
SO2 (Kilograms/day)	0.332	0.648

Table 11: Calculated non-GHG indicators of the project's demonstrators and new customers in Czech Republic

CEDA/Total in Czech Republic	CP1.2	CP1.1
FC (Tones/year)	514.303	1055.520
CO (Kilograms/day)	9.820	20.469
NH3 (Kilograms/day)	0.022	0.046
NOx (Tones/year)	9.867	20.568
PM (Kilograms/day)	0.292	0.609
VOC (Kilograms/day)	0.392	0.804
SO2 (Kilograms/day)	0.139	0.285

Table 12: Calculated non-GHG indicators of the project's demonstrators and new customers in Italy

ITACA/Total in Italy	CP1.2	CP1.1
FC (Tones/year)	23.0493	46.040
CO (Kilograms/day)	28.040	56.009
NH3 (Kilograms/day)	0.002	0.004
NOx (Tones/year)	0.420	0.840
PM (Kilograms/day)	0.002	0.004







ITACA/Total in Italy	CP1.2	CP1.1
VOC (Kilograms/day)	2.472	4.938
SO2 (Kilograms/day)	0.006	0.012

Finally, the overall values (i.e. summing up the above values) of the indicators are presented in the following table:

All users of GYR service	CP1.2	CP1.1
FC (Tones/year)	1,779.446	3,526.847
CO (Kilograms/day)	73.596	145.025
N2O (Kilograms/year)	118.262	235.226
NH3 (Kilograms/day)	0.178	0.350
NOx (Tones/year)	49.479	96.393
PM (Kilograms/day)	2.994	5.694
VOC (Kilograms/day)	10.473	19.947
SO2 (Kilograms/day)	0.477	0.947

Table 13: Calculated	non-GHG	indicators	of all	project's users

The values presented in the table above have been inserted into the KPIs webtool.

We have to notice that 3 after the end of the project values will be equal to the values at the end of the project even if the business plan estimates that 63 new users will purchase the GYR service. The reason is that the values mentioned in the KPIs web tool have as nominal condition the 8 existing users of GYR service and not the 71 potential users (i.e. 8+63=71). We selected as nominal conditions those 8 users because these specific users have actually resulted in the emissions savings presented. The other option, to define this KPI, would be to define first the total number of potential users, then define their environmental impact without using GYR platform (i.e. baseline scenario), continue with the definition of the environmental impact of all potential users minus 8 users (i.e. end of the project scenario) and finally, define the environmental impact of all users minus 71 users. In any case, it is impossible to calculate the potential environmental impact of all potential users (as we do not have data for them) so this option to define this KPI is not applicable.

#### 8.1. Greenhouse gas emissions

According to the calculations performed during the assessment of CP1.1 and CP1.2 under the frame of Action C1, the produced GHG emissions from the project demonstration are presented in the following tables.

Greek Users		
ATHINAIKI	CP1.2	CP1.1
CO2 (Tones)	434.229	874.682
CH4 (Kilograms)	21.779	41.644
N2O (Kilograms)	10.075	20.439

Table 14: Calculated GHG emissions of the project's demonstrators and new customers in Greece





DIGICOM	CP1.2	CP1.1
CO2 (Tones)	828.509	1713.970
CH4 (Kilograms)	41.707	81.902
N2O (Kilograms)	19.359	40.337
YOUTRADESMART	CP1.2	CP1.1
CO2 (Tones)	608.068	1114.080
CH4 (Kilograms)	30.610	53.236
N2O (Kilograms)	14.208	26.219
DASCO S.A.	CP1.2	CP1.1
CO2 (Tones)	599.317	1199.196
CH4 (Kilograms)	31.406	58.467
N2O (Kilograms)	15.170	29.374
Total in Greece	CP1.2	CP1.1
CO2 (Tones)	2,470.125	4,901.930
CH4 (Kilograms)	125.503	235.250
N2O (Kilograms)	58.813	116.370

 Table 15: Calculated GHG emissions of the project's demonstrators and new customers in Czech

 Republic

CEDA / Total in Czech Republic	CP1.2	CP1.1
CO2 (Tones)	2308.923	4738.669
CH4 (Kilograms)	13.738	28.197
N2O (Kilograms)	31.364	64.374

Table 16: Calculated GHG emissions of the project's demonstrators and new customers in Italy

ITACA / Total in Italy	CP1.2	CP1.1
CO2 (Tones)	103.478	206.693
CH4 (Kilograms)	33.774	67.463
N2O (Kilograms)	7.734	15.449

Based on the data presented above, and the real life practice period for each user of GYR platform (i.e. 17 months for ATHINAKI, CEDA and ITACA and 7 months for DIGICOM, YOUTRADESMART and DASCO S.A.) the average indicators are calculated and presented in the following tables.

Table 17: Calculated GHG indicators of the project's demonstrators and new customers in Greece

ATHINAIKI	CP1.2	CP1.1
CO2 (Tones/year)	306.515	617.423
CH4 (Kilograms/year)	15.373	29.395
N2O (Kilograms/year)	7.111	14.428





DIGICOM	CP1.2	CP1.1
CO2 (Tones/year)	1420.302	2938.235
CH4 (Kilograms/year)	71.498	140.404
N2O (Kilograms/year)	33.187	69.149
YOUTRADESMART	CP1.2	CP1.1
CO2 (Tones/year)	1042.403	1909.853
CH4 (Kilograms/year)	52.474	91.262
N2O (Kilograms/year)	24.357	44.947
DASCO S.A.	CP1.2	CP1.1
CO2 (Tones/year)	1027.400	2055.765
CH4 (Kilograms/year)	53.840	100.229
N2O (Kilograms/year)	26.006	50.355
Total in Greece	CP1.2	CP1.1
CO2 (Tones/year)	3,796.621	7,521.277
CH4 (Kilograms/year)	193.187	361.292
	00.660	170.000

Table 18: Calculated GHG indicators of the project's demonstrators and new customers in Czech Republic

CEDA / Total in Czech Republic	CP1.2	CP1.1
CO2 (Tones/year)	1629.828	3344.942
CH4 (Kilograms/year)	9.697	19.903
N2O (Kilograms/year)	22.139	45.440

Table 19: Calculated GHG indicators of the project's demonstrators and new customers in Italy

ITACA / Total in Italy	CP1.2	CP1.1
CO2 (Tones/year)	73.043	145.901
CH4 (Kilograms/year)	23.840	47.621
N2O (Kilograms/year)	5.459	10.905

Finally, the overall values (i.e. summing up the above values) of the indicators are presented in the following table:

#### Table 20: Calculated GHG indicators of all project's users

All users of GYR service	CP1.2	CP1.1
CO2 (Tones/year)	5,499.493	11,012.121
CH4 (Kilograms/year)	226.725	428.817
N2O (Kilograms/year)	118.262	235.226

The values presented in the table above have been inserted into the KPIs web tool.







Additional indicators for GHG emission are estimated using the above data. These indicators referred to CO2 kg/km per kg transported by a vehicle and to CH4 and N2O kg/km per kg transported. The tables below present the values of these indicators as well as the necessary data (total km travelled and total weight transported) to calculate them.

ATHINAIKI	CP1.2	CP1.1
Km	473,041.66	590,201.63
Kg	37,690.42	37,690.42
DIGICOM	CP1.2	CP1.1
Km	906,930.92	1,162,117.53
Kg	64461.464	64461.464
YOUTRADESMART	CP1.2	CP1.1
Km	665,624.19	755,376.40
Kg	66662.412	66662.412
DASCO S.A.	CP1.2	CP1.1
Km	705,348.38	842,924.59
Kg	63410.309	63410.309
Total in Greece	CP1.2	CP1.1
Km	2,750,945.16	3,350,620.15
Kg	232,224.61	232,224.61

#### Table 21: Km traveled and Kg transported in Greece

#### Table 22: Km traveled and Kg transported in Czech Republic

CEDA/Czech Republic	CP1.2	CP1.1
Km	1,723,205.88	1,958,387.77
Kg	477,484.00	477,484.00

#### Table 23: Km traveled and Kg transported in Italy

ITACA/Italy	CP1.2	CP1.1
Km	159,290.54	207,552.54
Kg	11835.92138	11835.92138

In the following, table the values of the indicators (i.e. CO2, CH4 and N2O Kg/km per kg) for Greece for each checkpoints (CP1.1 and CP1.2) are presented.

Table 24: Indicators CO2, CH4 and N2O Kg/km per kg in Greece

ATHINAKI	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	434229.4155	874682.023	CO2 (Kg/km)	0.917	1.482	CO2 (Kg/km	2.4355E-05	3.93205E-05







						per kg)		
СН4 (Кg)	21.778	41.643	CH4 (Kg/km)	4.60402E-05	7.05583E-05	CH4 (Kg/km per kg)	1.22154E-09	1.87205E-09
N2O (Kg)	10.074	20.439	N2O (Kg/km)	2.12974E-05	3.4631E-05	N2O (Kg/km per kg)	5.65062E-10	9.18828E-10
DIGICOM	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	828509.724	1713970.722	CO2 (Kg/km)	0.913	1.474	CO2 (Kg/km per kg)	1.41717E-05	2.28799E-05
CH4 (Kg)	41.707	81.902	CH4 (Kg/km)	4.59872E-05	7.04771E-05	CH4 (Kg/km per kg)	7.13406E-10	1.09332E-09
N2O (Kg)	19.359	40.337	N2O (Kg/km)	2.1346E-05	3.471E-05	N2O (Kg/km per kg)	3.31144E-10	5.38461E-10
YOUTRADESMART	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	608068.490	1114080.969	CO2 (Kg/km)	0.913	1.474	CO2 (Kg/km per kg)	1.37038E-05	2.21244E-05
CH4 (Kg)	30.610	53.236	CH4 (Kg/km)	4.59872E-05	7.04771E-05	CH4 (Kg/km per kg)	6.89852E-10	1.05722E-09
N2O (Kg)	14.208	26.219	N2O (Kg/km)	2.1346E-05	3.471E-05	N2O (Kg/km per kg)	3.2021E-10	5.20683E-10
DASCO S.A.	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
СО2 (Кg)	599317.168	1199196.755	CO2 (Kg/km)	0.8496	1.422	CO2 (Kg/km per kg)	1.33996E-05	2.24358E-05
CH4 (Kg)	31.406	58.467	CH4 (Kg/km)	4.45268E-05	6.93623E-05	CH4 (Kg/km per kg)	7.02202E-10	1.09387E-09
N2O (Kg)	15.170	29.374	N2O (Kg/km)	2.15075E-05	3.48478E-05	N2O (Kg/km per kg)	3.3918E-10	5.49561E-10
Total Greece	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	2470124.798	4901930.469	CO2 (Kg/km)	3.594	5.854	CO2 (Kg/km per kg)	0.0000656303	0.0001067606
CH4 (Kg)	125.503	235.250	CH4 (Kg/km)	0.0001825414	0.0002808747	CH4 (Kg/km per kg)	0.000000033	0.0000000051
N2O (Kg)	58.8126	116.369	N2O (Kg/km)	0.0000854970	0.0001388988	N2O (Kg/km per kg)	0.000000016	0.0000000025

In the following, table the values of the indicators (i.e. CO2, CH4 and N2O Kg/km per kg) for Czech Republic for each checkpoints (CP1.1 and CP1.2) are presented.

#### Table 25: Indicators CO2, CH4 and N2O Kg/km per kg in Czech Republic

CEDA/Total Czech Republic	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	2308923.718	4738669.118	CO2	1.339	2.419	CO2	0.0000028062	0.00000506







			(Kg/km)			(Kg/km per kg)		76
CH4 (Kg)	13.738	28.197	CH4 (Kg/km)	0.0000079725	0.0000143981	CH4 (Kg/km per kg)	0.0000000000	0.00000000 00
N2O (Kg)	31.364	64.374	N2O (Kg/km)	0.0000182014	0.0000328712	N2O (Kg/km per kg)	0.0000000000	0.00000000 01

In the following, table the values of the indicators (i.e. CO2, CH4 and N2O Kg/km per kg) for Italy for each checkpoints (CP1.1 and CP1.2) are presented.

Table 2	26:	Indicators	CO2.	CH4 and	N2O	Kø/km	per	kg in	Italv
i abic i	<b>_</b> 0.	indicators	CO2,	CIII alla	1120	16/111	PCL	<b>K</b> 5 III	Itary

ITACA/Total Italy	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	103478.061	206693.538	CO2 (Kg/km)	0.649	0.995	CO2 (Kg/km per kg)	0.0000548853	0.00008413 89
CH4 (Kg)	33.774	67.463	CH4 (Kg/km)	0.000212	0.000325	CH4 (Kg/km per kg)	0.0000000179	0.00000002 75
N2O (Kg)	7.734	15.449	N2O (Kg/km)	0.000048	0.000074	N2O (Kg/km per kg)	0.0000000041	0.00000000 63

Finally, in the following, table the total values of the indicators (i.e. CO2, CH4 and N2O Kg/km per kg) for each checkpoints (CP1.1 and CP1.2) are presented.

Total	CP1.2	CP1.1		CP1.2	CP1.1		CP1.2	CP1.1
CO2 (Kg)	4882526.578	9847293.126	CO2 (Kg/km)	5.584	9.269	CO2 (Kg/km per <mark>mg</mark> )	123	195.9670
CH4 (Kg)	173.016	330.910	CH4 (Kg/km)	0.000402	0.000620	CH4 (Kg/km per <mark>mcg</mark> )	21.3	32.6
N2O (Kg)	97.912	196.193	N2O (Kg/km)	0.000152	0.000246	N2O (Kg/km per <mark>mcg</mark> )	5.7	8.9

#### Table 27: Indicators CO2, CH4 and N2O Kg/km per kg

The values presented in the table above have been inserted into the KPIs webtool.

We have to notice that 3 after the end of the project values will be equal to the values at the end of the project even if the business plan estimates that 63 new users will purchase the GYR service. The reason is that the values mentioned in the KPIs web tool have as nominal condition the 8 existing users of GYR service and not the 71 potential users (i.e. 8+63=71). We selected as nominal conditions those 8 users because these specific users have actually resulted in the emissions savings presented. The other option, to define this KPI, would be to define first the total number of potential users, then define their environmental impact without using GYR platform (i.e. baseline scenario), continue with the definition of the environmental impact of all potential users minus 8 users (i.e. end of the project scenario)







and finally, define the environmental impact of all users minus 71 users. In any case, it is impossible to calculate the potential environmental impact of all potential users (as we do not have data for them) so this option to define this KPI is not applicable.

#### Warning gotten by the KPIs web tool

We got the following WARNINGS when the Check KPI Values Ranges was performed:

The impact of an average LIFE project for the indicator ("6.1. Air - emissions - CO"), calculated as "Project End - Project Start" and measured in "kg/day", is expected to be in the following range: -68.493 kg/day <= Project End - Project Start <= 0 kg/day. The impact of LIFE GYR project concerning this indicator is equal to -71.46 kg/day which is slightly larger than the lower average bound.

The impact of an average LIFE project for the indicator ("6.1. Air - emissions - NO2/NOX"), calculated as "Project End - Project Start" and measured in "tn/year", is expected to be in the following range: -25 tn/year <= Project End - Project Start <= 0 tn/year. The impact of LIFE GYR project concerning this indicator is equal to -46.92 tn/year which is at the same order than the lower average bound. We have to mention that during the real life practice period more than 450.000 km were travelled by trucks in order to implement more than 28,000 trips resulting a significant impact.

The impact of an average LIFE project for the indicator ("8.1.1. CO2 - Transport/ mobility (incl. road)"), calculated for the Compound ID:27667 as "Project End - Project Start" and measured in "kg CO2/unit produced (production of material products or environmental outcomes) ", is expected to be in the following range: -50.95 kg CO2/unit produced (production of material products or environmental outcomes) <= Project End - Project Start <= 0 kg CO2/unit produced (production of material products or environmental outcomes). The impact of LIFE GYR project concerning this indicator is equal to -72.99 kg CO2/unit produced which is at the same order than the lower average bound. We have to mention that during the real life practice period more than 450.000 km were travelled by trucks in order to implement more than 28,000 trips resulting a significant impact.

The impact of an average LIFE project for the indicator ("8.1.1. CO2 - Transport/ mobility (incl. road)"), calculated for the Compound ID:27667 as "Project End - Project Start" and measured in "Tons of CO2 /year", is expected to be in the following range: -3,186.51 Tons of CO2 /year <= Project End - Project Start <= 0 Tons of CO2 /year. The impact of LIFE GYR project concerning this indicator is equal to -5,512.63 CO2/ year which is at the same order than the lower average bound. We have to mention that during the real life practice period more than 450.000 km were travelled by trucks in order to implement more than 28,000 trips resulting a significant impact.

The impact of an average LIFE project for the indicator ("8.1.2. Other greenhouse gases - CH4"), calculated for the Compound ID:40294 as "Project End - Project Start" and measured in "kg GHG/unit produced (production of material products or environmental outcomes) ", is expected to be in the following range: -4.09 kg GHG/unit produced (production of material products or environmental outcomes) <= Project End - Project Start <= 0 kg GHG/unit produced (production of material products or environmental outcomes). The impact of LIFE GYR project concerning this indicator is equal to -11.3 kg GHG/unit







produced which is at the same order than the lower average bound. We have to mention that during the real life practice period more than 450.000 km were travelled by trucks in order to implement more than 28,000 trips resulting a significant impact.

Note: The Kg CO2/unit produced selected in the KPI web tool is the CO2 KG/KM travelled per milligram moved. We could not use the unit [kg CO2/km per kg (Road)] as the resulting values could not be inserted into the system, as the existing milligrams have to be divided with 10<sup>6</sup> and the system accepts up to two decimal places. Similar to CO2, the Kg CH4/unit produced selected is the CH4 KG/KM travelled per microgram moved. We could not use the unit [kg CH4/km per kg (Road)] as the resulting values could not be inserted into the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system accepts up to two decimal places. Finally, the Kg N2O/unit produced selected is the N2O KG/KM travelled per microgram moved. We could not use the unit [kg N2O/km per kg (Road)] as the resulting values could not be inserted into the system as the existing microgram moved. We could not use the unit [kg N2O/km per kg (Road)] as the resulting values could not be inserted into the system as the existing microgram moved. We could not use the unit [kg N2O/km per kg (Road)] as the resulting values could not be inserted into the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system as the existing micrograms have to be divided with 10<sup>9</sup> and the system accepts up to two decimal places.

#### F. Societal outputs and outcomes

# 10.2. Involvement of non-governmental organisations (NGOs) and other stakeholders in project activities

#### Public body/bodies

The coordinator of the project Dr. Georgios K.D. Saharidis during the implementation of GYR project became an external advisor member of the national (i.e. Greece) board of logistics and supply chain. His involvement to the board was important as it was assigned to him the responsibility to prepare and present to the relevant stakeholders a report about the legislation of green logistics in Greece. The report was communicated to the board of the parliament responsible to prepare the new law for the logistics.

The value at the end of the project of this indicator is equal to 1 and 3 years after the end of the project it continues to be equal to 1 as Dr. Saharidis will continue to be member of the board.

#### **Private for profit**

The last 7 months of the real life practice, the 3 new customers of GYR service which purchased the service after the end of the project for a period of 3 years, were gotten involved into the development of the final (current) version of the GYR web and mobile apps. The technical team of GYR project, in collaboration with the technical team of the new customers as well as the new users of GYR service worked together for 7 months in order to introduce additional functionalities into the final version of the apps. The value of this indicator at the end of the project is equal to 3. After the end of the project, it will continue to be equal to 3 as the project activities were ended.

#### 11.1. Website (mandatory)

The unique visits to the website is equal to 5109. Our estimation 3 years after the end of the project (ie.e 36 motnhs) of the unique visits is estimated to 4,000 based on an average





number of visits per month equal to 111 visits per month (i.e. 5109/46 months that the website is available).

We associated the number of downloads with GYR mobile application downloads. At the end of the project in total 149 downloads (18 download per organization using the web app) of GYR mobile app were reached. It is expected that at least 500 downloads will be performed by the new customers of GYR service during the 3 year period after the end of the project.

Average visit duration in the project website is 2.5 minute. It is expected to reach 4 minutes 3 years after the end of the project, due to new customers of GYR Company.

#### Warning gotten by the KPIs web tool

We got the following WARNING when the Check KPI Values Ranges was performed:

The impact of an average LIFE project for the indicator ("10.2. Involvement of nongovernmental organisations (NGOs) and other stakeholders in project activities - Private for profit"), calculated as "Project End - Project Start" and measured in "number of stakeholders involved due to the project", is expected to be in the following range: 0 number of stakeholders involved due to the project <= Project End - Project Start <= 45.5 number of stakeholders involved due to the project. The impact of LIFE GYR project concerning this indicator is equal to 322 stakeholders involved. This number is higher than the average number of stakeholders involved due to high number of events organized in the frame of the project (i.e. workshops, webinars, conference etc.).

#### **11.2.** Other tools for reaching/raising awareness of the general public

a) Number of discrete Project Reports drafted

The total number of reports drafted is equal to 31 including, monthly reports, trimester reports, progress report, mid-term report, final report and Laymans report.

b) Number of different publications made (Journal/conference)

Three publications have been made in the frame of 3 national conferences (i.e. ESCC 2020, ESCC 2021 and ESCC 2022).

Three years after the end of the project, we estimate that 3 additional publication will be made in the frame of 3 international conferences (e.g. ESCC 2024, 2025, 2026).

c) Other distinct media products created

In total 5 promotional videos have been produced.

Additionally, in total 11 newsletters, have been produced and disseminated. The total people reached are 3,041 and the people reached for each newsletter are presented in the following table.

Table 28: People reached from project newsletters

Newsletter	People reached
Newsletter #1	102
Newsletter #2	109





304
306
308
303
312
315
326
328
328

Finally, 4 unique leaflets (Greek, English, Italian, Czech version) and one promotional package including mousepads, note pads etc. have been created during the project.

3 years after the end of the project 3 additional promotional video and 3 additional newsletter will be created.

d) Number of Hotline/information centers created

An online helpdesk has been created in the frame of the official website of the project. The online helpdesk is used frequently by the users of the applications where question related to the use of the applications are posted. Additionally, visitors of the website requested information about the deliverables of the project, as well as information about the organization of the project's events.

e) Number of events/exhibitions organised

In the frame of the project 7 workshops have been organized, 3 workshops in Greece, 3 workshops in Czech Republic and 1 workshop in Italy. More details about the organization of the workshops one may find in Deliverable D2. In addition, UTH co-organizes with other international universities in a yearly base the International Conference of Energy, Sustainability and Climate Crisis. For the year 2020, 2021 and 2022, the conference was dedicated to LIFE GYR project with the organization of special sessions related to LIFE GYR project and round tables. In total, 10 events have been organized in the frame of the project.

After the end of the project, at least every year special sessions and round tables dedicated to the objectives of LIFE GYR project discussing the after-life activities and results will be organized in the frame of the next yearly ESCC conferences.

f) Number of different displayed information created (posters, information boards)

Displayed information (poster, information boards): 8 notice boards have been produced which were installed at each beneficiary's facilities and 40 posters were distributed among project beneficiaries to be used in conferences participation, workshops, etc.

In total, 48 different displayed information were created.

#### Warning gotten by the KPIs web tool

We got the following WARNING when the Check KPI Values Ranges was performed:





The impact of an average LIFE project for the indicator ("11.2. Other tools for reaching/raising awareness of the general public - Number of different displayed information created (posters, information boards)"), calculated as "Project End - Project Start" and measured in "Number of outcomes (e.g. nr of reports, events, etc)", is expected to be in the following range: 0 Number of outcomes (e.g. nr of reports, events, etc) <= Project End - Project Start <= 142 Number of outcomes (e.g. nr of reports, events, etc). The impact of LIFE GYR project concerning this indicator is equal to 17,448 which is much higher then the average number. This number is significant high as 15,000 flyers have been produced and delivered during the project.

#### 12.1. Networking (mandatory)

LIFE GYR project has engaged in networking with 5 projects a) ALICE, b) GRAGE, c) GREENOMED, d) RE-SOURCE, e) LIFE for Silver Coast project. The networking activities allowed for the exchange of knowledge, sharing of best practices, and mutual support in achieving common objectives.

3 years after the end of the project, it is expected that networking activities will be implemented with at least one project per year.

#### 12.2. Professional training or education

Professionals - experts in the field

In the frame of the project, GYR team (i.e. UTH, MILITOS, CEDA and ITACA) trained one by one or in small groups of 4-5 persons the drivers using the mobile app. In total, 149 downloads (18 downloads per organization) of GYR mobile app were reached, resulting in the training of 149 users.

Additionally, GYR team trained one by one or in small groups of 2-3 persons the users of the web application. On average 5.5 individuals per organization were trained on how to use the web application in order to create a daily green routing plan. In total, 44 individuals were trained on the use of the web application.

Summarizing, at the end of the project, 193 logistics experts were trained on how to use GYR service.

Three years after the end of the project and based on the business plan, 63 new customer will purchase the GYR service resulting 1134 (i.e. 18\*63) new trained users of the mobile application and 346 (i.e. 5.5\*63) new trained users of the web application. Summarizing, three years after the end of the project the users trained will be equal to 1673.

Note: the training session included the presentation of the user manual to the new user, then the presentation of a demo example, continued with the practice of the user using the application with a demo account. The duration of the training session took on average 2-4 hours depending on the number of the participants.







### G. Economic outputs and outcomes

#### 13. Jobs

The total hours of additional staff generated in the frame of project is equal to 37,577.51 which corresponds to 21.84FTE (i.e. 37,577.51Hours/1720 Hours of 1 FTE).

After the end of the project 4 FTE are estimated that will be necessary for the GYR company. The FTE positions correspond to a FTE position of 2 developers necessary for the maintenance and improvement of the front end and back end of the GYR service, one FTE position of a manager responsible for the management of the company and on FTE position for the business development.

# 14.1. Running cost/operating costs during the project and expected in case of continuation/replication/transfer after the project period

The running costs of the project are equal to €2.231.219,14.

The Running cost/operating costs expected in case of continuation/replication/transfer after the project period is equal to 1,631,000 EUR. Based on the submitted business plan, the respective indicator pertains to the costs associated with in-house staff for both front and back office functions, office facilities, and marketing activities based on the Distributor Model examined.

# 14.2.1. Capital expenditure expected in case of continuation/replication/transfer after the project period

The Capital expenditure expected in case of continuation/replication/transfer after the project period is equal to 53,000 EUR. Based on the submitted business plan, the respective indicator pertains the main components dedicated for IT infrastructure of the office, servers to run the customers' routing, and office renovation.

# 14.2.2. Operating expenses expected in case of continuation/replication/transfer after the project period

The operating expenses expected in case of continuation/replication/transfer after the project period is equal to 1,631,000 EUR. Based on the submitted business plan, the respective indicator pertains to the costs associated with in-house staff for both front and back office functions, office facilities, and marketing activities as the operating expenses are considered the same as point 14.1 running costs/operating expenses.

# 14.2.3. Revenue expected in case of continuation/ replication/transfer after the project end

The revenue expected in case of continuation/ replication/transfer after the project end is equal to 1,920,000 EUR which is based on assumed 131 customers at the end of year 3 with average vehicle fleets and charges per vehicle and month.





# 14.2.4. Cost reduction expected in case of continuation/ replication/transfer after the project end

Based on the submitted business plan, there is no cost reduction of operating expenses. In fact they will increase with the increased business and net sales. they will decline as a % of top line, but increase absolutely.

#### 14.3. Future funding

The future funding could not be estimate at this time.

#### 14.4.1. Entry into new entities/projects

Replication

GYR service was replicated in the frame of the project to 3 new customers (i.e. DIGICOM, YOUTRADESMART, DASCO S.A.) which used the service for a period of 7 months resulting in additional environmental benefits. At the end of the project, these (i.e. DIGICOM, YOUTRADESMART, DASCO S.A.) and two more (i.e. MEMEDIMOS and IBEC) customers (five in total) decided to purchase the GYR service and signed contracts.

Continuation

GYR service continues to be used use by the demonstrators (i.e. ATHINAKI, PLUS, KOUKOUZELIS, GLS Company via CEDA, DS Logistic s.r.o. via ITACA) of the project for a period of at least 3 years. Contracts were signed between the GYR Company and these companies for the continued use of the GYR service. Additionally, GYR service continues to be used by the three new customers of GYR Company found in the frame of the project. The new customers (i.e. DIGICOM, YOUTRADESMART, DASCO S.A.) will continue using the GYR service. Contracts were signed between the GYR Company and with these 3 companies for the continued use of the GYR service.







### 4 Annex

One may download the exported excel file from the KPI web tool using the following link:

https://www.dropbox.com/scl/fo/t47bo6eju0eflepvx9mcq/h?dl=0&rlkey=ebwjmhdcsjgbfi 7qnry56qnva

The name of the file is: kpi\_project\_data\_snapshot\_export\_11\_07\_2023.xls

