

# LIFE GREENYOURMOVE DEVELOPMENT AND PROMOTION OF A CO-MODAL JOURNEY PLANNING PLATFORM TO MINIMIZE GHG EMISSION IN EUROPE

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



# GreenYourMove

---

## Consortium

- ▶ University of Thessaly, Greece ([www.mie.uth.gr](http://www.mie.uth.gr))
- ▶ AVMap, Greece ([www.avmap.gr](http://www.avmap.gr))
- ▶ CHAPS, Czech Republic ([www.chaps.cz](http://www.chaps.cz))
- ▶ EMISIA S.A., Greece ([www.emisia.com](http://www.emisia.com))
- ▶ INPROP, Slovak Republic (<http://www.inprop.sk/>)
- ▶ TRAINOSE, Greece ([www.trainose.gr](http://www.trainose.gr))

## Co-funded

- ▶ LIFE (<http://ec.europa.eu/environment/life/>) – the EU financial instrument for the environment
- ▶ Green Fund (<http://www.prasinotameio.gr/index.php/el/>)

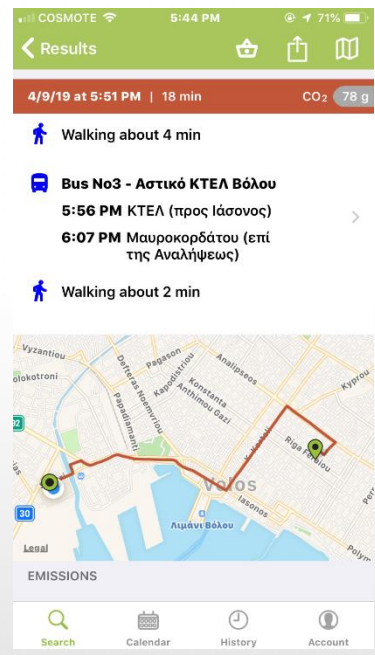
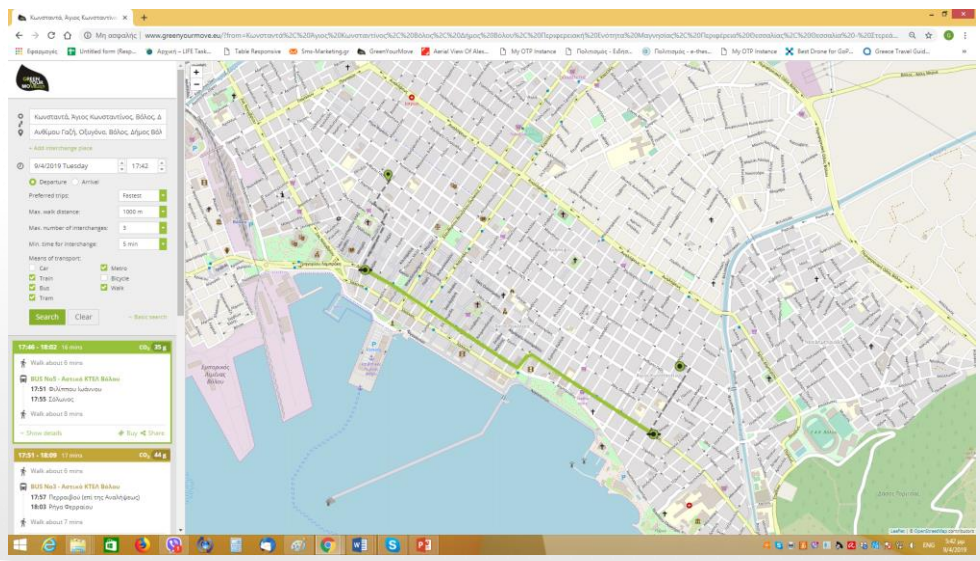
Duration: 48 months

Total budget: 1,245,052 Euro

# GreenYourMove

## Main outcome

- ▶ Web and smart phone application for green journey planning in Greece, Czech Republic and Slovak Republic.
- ▶ Additional countries: Cyprus, Luxemburg, Nederland's, Switzerland, Sweden, Denmark Estonia.



# Greek Transport operators in GreenYourMove app

## City buses

- ▶ Alexandroupoli
- ▶ Komotini
- ▶ Serres
- ▶ Katerini
- ▶ Volos
- ▶ Larissa
- ▶ Trikala
- ▶ Xalkida
- ▶ Lamia
- ▶ Patra
- ▶ Athens (OASA outdated)
- ▶ Thessaloniki (at the end of April)
- ▶ Chania (at the end of 2019)
- ▶ Kerkira (at the end of 2019)
- ▶ Rodos (at the end of 2019)
- ▶ Mitilini (at the end of 2019)
- ▶ Iraklio (at the end of 2019)

## Intercity buses (KTEL)

- ▶ Evrou
- ▶ Rodopis
- ▶ Serron
- ▶ Pierias
- ▶ Magnisias
- ▶ Larissa
- ▶ Trikala
- ▶ Xalkida
- ▶ Fthiotidas
- ▶ Ahaias
- ▶ Thivas
- ▶ Attikis (at the end of Mai)
- ▶ Chania-Rethimnou (at the end of 2019)
- ▶ Rodos (at the end of 2019)
- ▶ Mitilini (at the end of 2019)
- ▶ Iraklio-Agios Nikolaos (at the end of 2019)

## Train/Tram

- ▶ Trainose greek network
- ▶ Metro network of Athens
- ▶ Tram network of Athens.



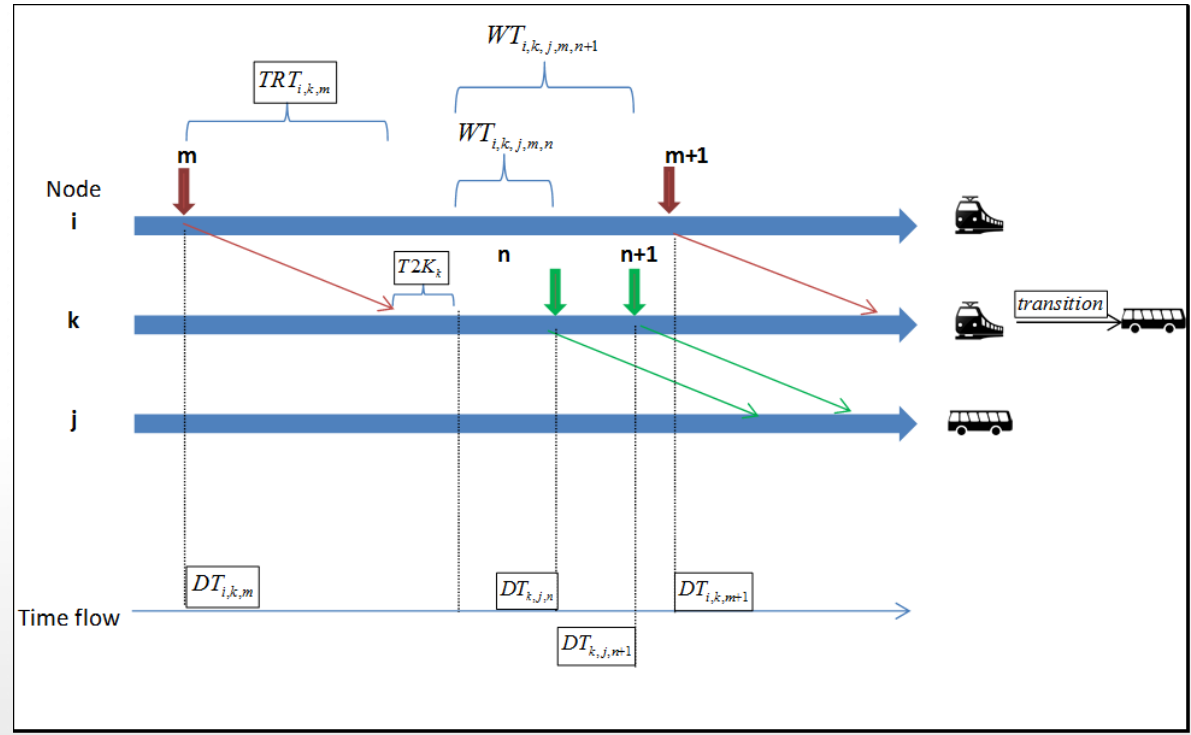
# Environmental impact

## CO2 savings until December 2018

Operator	Increase of tickets	Average KM per passenger	PKM	VKM (/1,2)	VKM*205 (CO2) per month	CO2 t (7 months)
City Buses	2736,25	18	49252,5	41043,75	8413968,75	58,89778125
Intercity buses	1537	120	184440	153700	31508500	220,5595
Intercity buses	676,875	120	81225	67687,5	13875937,5	97,1315625
Intercity buses	8504,5	120	1020540	850450	174342250	1220,39575
City Buses	16037,5	18	288675	240562,5	49315312,5	345,2071875
Intercity buses	1129,25	120	135510	112925	23149625	162,047375
Intercity buses	4392,375	120	527085	439237,5	90043687,5	630,3058125
Intercity buses	5579,125	120	669495	557912,5	114372062,5	800,6044375
City Buses	84178,375	18	1515210,8	1262675,625	258848503,1	1811,939522
City Buses	14742,25	18	265360,5	221133,75	45332418,75	317,3269313
City Buses	13974,625	18	251543,25	209619,375	42971971,88	300,8038031
					Total	5965,219663

# Socioeconomic impact

## Timetable synchronization



# Rescheduling Athens to Thessaloniki

	From Athens To Thessaloniki			
	Current	10 min	30 min	90 min
<b>Monday</b>	7:18	7:20	7:33	8:03
	10:18	10:19	10:33	10:41
	14:18	14:19	14:24	13:33
	16:16	16:20	16:24	15:33
	18:18	18:22	18:32	19:03
		<b>Current</b>	<b>10 min</b>	<b>30 min</b>
<b>Tuesday</b>	7:18	7:13	7:03	6:33
	10:18	10:19	10:33	10:40
	14:18	14:20	14:25	13:33
	16:16	16:20	16:24	15:34
	18:18	18:22	18:33	19:00
		<b>Current</b>	<b>10 min</b>	<b>30 min</b>
<b>Wednesday</b>	7:19	7:14	7:04	6:34
	10:18	10:23	10:33	10:40
	14:18	14:19	14:24	13:33
	16:16	16:21	16:24	15:34
	18:18	18:23	18:32	19:00
		<b>Current</b>	<b>10 min</b>	<b>30 min</b>
<b>Thursday</b>	7:18	7:13	7:03	6:33



# Rescheduling Athens to Thessaloniki

	Current	± 5min	± 15min	± 45min
Total waiting time	691,791	681,208	656,860	602,682
Av. Waiting time	275	271	261	240
Feasible transitions	23,768	23,743	23,732	23,469

# Rescheduling Athens to Thessaloniki

	Current	± 5min	± 15min	± 45min
Current	0			
± 5min	0.015	0		
± 15min	0.050	0.036	0	
± 45min	0.13	0.115	0.08	0

The resulting show that more relaxation leads to significantly minimized waiting times. Specifically the 90 minute window, or  $\pm 45\text{min}$  case, produces a better solution than the 10 minute window, or  $\pm 5\text{min}$  case, by reducing the total waiting time 13%, which means 35 minutes less waiting time on average.

# Rescheduling Athens to Chalkida

	Current	± 5min	± 15min	± 45min
Current	0			
± 5min	0.026	0		
± 15min	0.059	0.034	0	
± 45min	0.158	0.135	0.105	0



Stay tuned:

[www.greenyourmove.org](http://www.greenyourmove.org) & [www.greenyourmove.eu](http://www.greenyourmove.eu)



[www.facebook.com/GreenUrMove](http://www.facebook.com/GreenUrMove)



<https://twitter.com/GreenYourMove>



[www.linkedin.com/company/greenyourmove](http://www.linkedin.com/company/greenyourmove)

# Thank you for your attention!

Project co-funded by LIFE, the EU financial instrument for the environment - LIFE14 ENV/GR/000611

Home About Co-Modality Workshops & Webinars Communication Outcomes Follow Us More

# GREEN YOUR MOVE

Project Facts & Figures About us Communication

### News & Events

February 18, 2016  
**23rd ITS World Congress - Enhancing Liveable Cities and Communities**  
 The 23rd Intelligent Transport Systems World Congress will be held in Melbourne on October 2016 with theme "ITS - Enhancing Liveable Cities and Communities".  
[Read more](#)

February 17, 2016  
**CZECHBUS 2015: The 5th jubilee year**  
 The successful CZECHBUS trade fair was held for fifth year, from 24 to 26 November 2015. Organised by Incheba Expo Praha company.  
[Read more](#)

February 15, 2016  
**Collective Innovation for Public Transport in European Cities looks for researchers**  
 The Transport Systems Research Group of the Aristotle University of Thessaloniki (TSRG/AUTH) is looking to fill 2 full-time work positions in the framework of the "Collective Innovation for Public Transport in European Cities" (CIPTECI) project.  
 Deadline for applications' submission: 19/02/2016  
[Read more](#)

[View previous News & Events](#)



Project co-funded by LIFE, the EU financial instrument for the environment  
LIFE14 ENV/GR/000611

Project co-funded by Green Fund

