



# Innovative Solutions for Low Carbon Urban Development at Local Level

## Macedonian experience

Serbia's climate talks - on the way to Paris  
-Forging climate-smart partnerships –

Belgrade, 5 October 2015

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# International status

UNFCCC

- Non-Annex I

Copenhagen Accord

- No quantified mitigation measures submitted

EU candidate country

- Aligning its positions with the EU



2015 February

I

- 2003 – First National Report to UNFCCC

II

- 2008 – Second National Report to UNFCCC

III

- 2014 – Third National Report to UNFCCC



- August 2015 – INDC submitted

# #inno4dev

- The transition to a low carbon country will transform our whole economy.
- It will change our industry, the supply chains of our businesses and the way we all live and work.
- Innovation is key to developing the low carbon technologies that will underpin this transition, and make it affordable and accessible.
- New technology development is essential to enable us to meet our EU and global climate change objectives.
- Achieving emissions cuts requires a process of "decarbonization".
- New and innovative low carbon technologies help to reduce greenhouse gas emissions and create new employment and growth.

# The story behind

Climate  
Change  
Communi-  
cation  
Strategy



UNDP  
Istanbul  
Regional  
Hub



Social  
Innovation  
Hub



Climate  
change  
survey



- **2** years old
- More that **10** exciting ideas
- Citizens participation in Programme and policy development
- External expertise into UDP programming and project implementation
- Open innovation/service design
- **3** game-changers

# #Inno4CC

Product development  
Mobile app



Innovative Process  
Climate Change Challenge



Different Methodology  
Thinking Futures w/  
Foresight Xplorer



#ОдТебеЗависи





#ОдТебеЗависи



- Usage of mobile technologies 4 behavioral change.
- Brings outside expertise in UNDP project implementation, give chance to those that would normally not get it
- Ensured citizens involvement in strategy and policy making enabling 'futures' considerations

# SKOPJE GREEN ROUTE



St. Cyril and Methodius University in Skopje  
FACULTY OF COMPUTER  
SCIENCE AND ENGINEERING



Empower lives.  
Resilient societies.

The road transport sector is the second biggest emitter of greenhouse gases in the country. This sector accounts for an annual average of 9.15% of overall greenhouse gas emissions.

9.15%

In 2009, the average road transportation emissions equalled the total annual capacity of the country's forestry sector to absorb CO<sub>2</sub>.



It is estimated that the current number of vehicles per inhabitants will double by 2020.



## Total number of registered vehicles

2006

278874



2007

287222



2008

308494



2009

332365



2010

360789



The city of Skopje is becoming more and more congested, with regular traffic jams, delays and accidents, and with high levels of air pollution.



Alternative means of transport are available, but the public have not yet adopted these alternatives on a sufficient scale to reduce pollution and congestion.

**The Skopje Green Route app** is a navigation tool that encourages people to adopt greener means of transport through the city. The app provides continuous information on traffic conditions, promote the use of cleaner and more economical means of transport and ultimately contribute to a reduction in the greenhouse gas emissions caused by motorized transport in Skopje.

Based on the Google Maps platform and real-time information on junction flows, congestion, and traffic accidents, the app and the web platform contain the following tabs to choose from:

Tab for selection of the desired transport mode



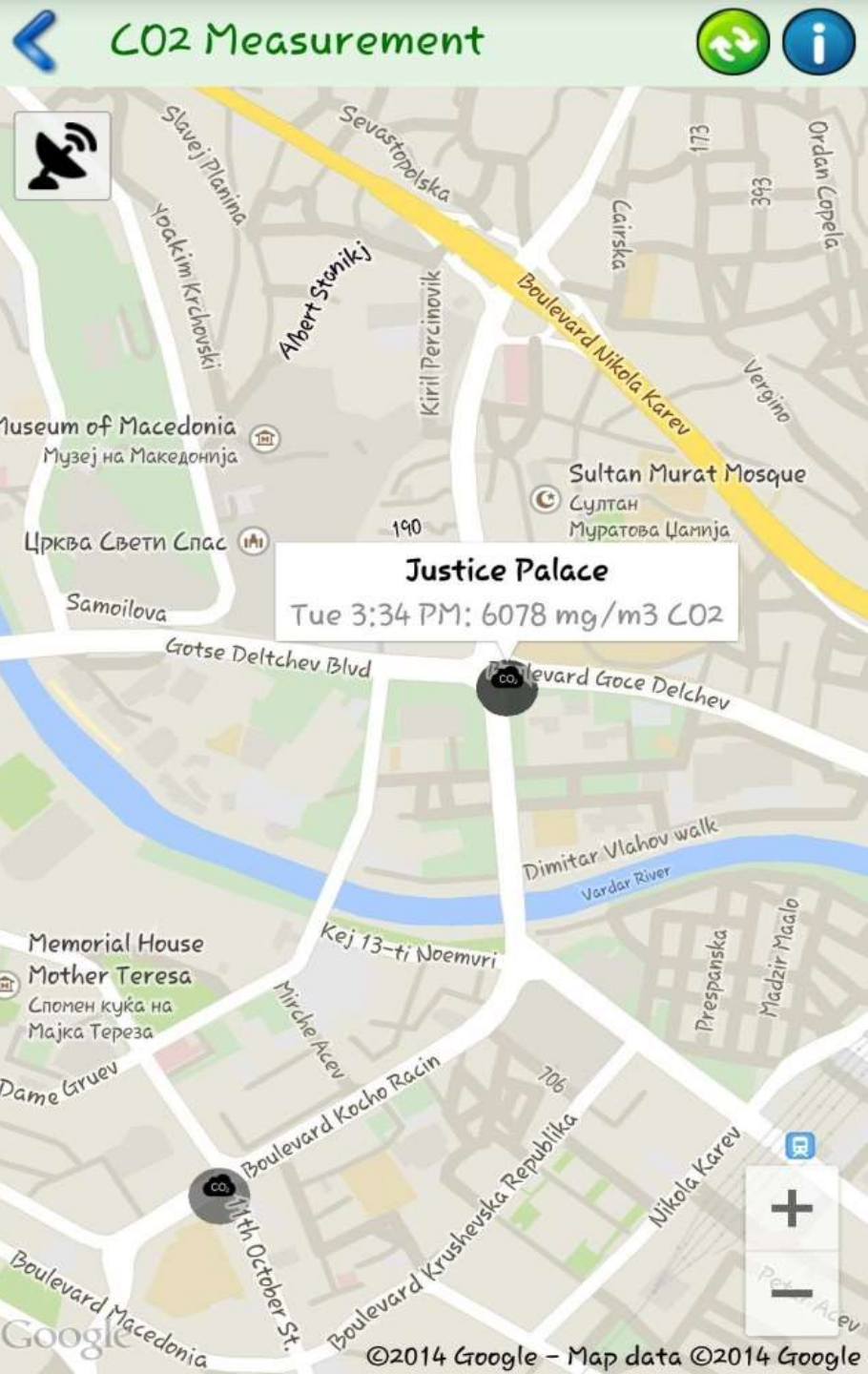
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CO<sub>2</sub>

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## The app gives you useful tips and hints about



**Walking** – info on the greenest routes to take and the time needed to reach the destination.



**Cycling** - info on the available infrastructure, info on bike rental locations, costs and the time needed to reach the destination.



**Public Transport** – info on the location of the nearest bus-stops, the most appropriate bus routes for each destination, bus transfers, ticket prices, the time needed to reach the destination, as well as info on the CO2 emissions caused by each journey.



**Private vehicles** – info on recommended routes, distances, locations of traffic congestion, real-time reporting on traffic jams, travel-time needed, average costs and CO2 emissions caused by the journey. This mode also presents the location, capacity and costs of public parking spaces in Skopje.



B  
P  
A



The app will also regularly provide you with updates on:



Construction works



Closed street



Car accidents



Traffic jams



[www.skopjgreenroutes.mk](http://www.skopjgreenroutes.mk)

Available for Android

## Trip planner



My location



4.0 km 8 mins 29 MKD 693.7g

via Cvetan Dimov

693 g CO2 = 33 X

33 trees have to work today to absorb all of the CO2 you've emitted.



3.8 km 10 mins 28 MKD 669.73g

via Lazar Lichenoski

669 g CO2 = 31 X

31 trees have to work today to absorb all of the CO2 you've emitted.



3.8 km 10 mins 28 MKD 669.38g

# More info at:

Download at play store:

A stylized graphic of a leaf with a green stem and four rounded lobes. Each lobe contains a white icon on a colored background: a pedestrian on a green lobe, a car on a red lobe, a bus on an orange lobe, and a cyclist on a teal lobe.

Useful information

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**Web site:**  
[www.skopjegroute.mk](http://www.skopjegroute.mk)

**Contact:**  
[contact@skopjegroute.mk](mailto:contact@skopjegroute.mk)

**Select the desired transport mode!**

FIRST CLIMATE CHALLENGE

LAUNCHED:

IT'S YOUR CITY.

IT DEPENDS ON YOU!

#ОдТебеЗависи



# The Challenge #ItDependsOnYou

- Prototyped in 2 countries: Macedonia and Armenia
- Launched in Dec 2014, the Challenge invited citizens to step up and play a role in addressing the Climate Change issue, by submitting proposals for innovative projects aimed at solving three fundamental climate-related challenges:
  - 1 What can we do to reduce the level of carbon emissions in cities?
  - 2 How can we better adapt to the climate challenges we face?
  - 3 How can we make better use of smart technologies to increase our resilience?



# The Methodology

## Social Innovation Camp Methodology

- Traditional media
- Social media
- Itch workshops
- Prototyping event

### Itch workshops

- 5 cities
- More than 100 citizens participated



#ОдТебеЗависи

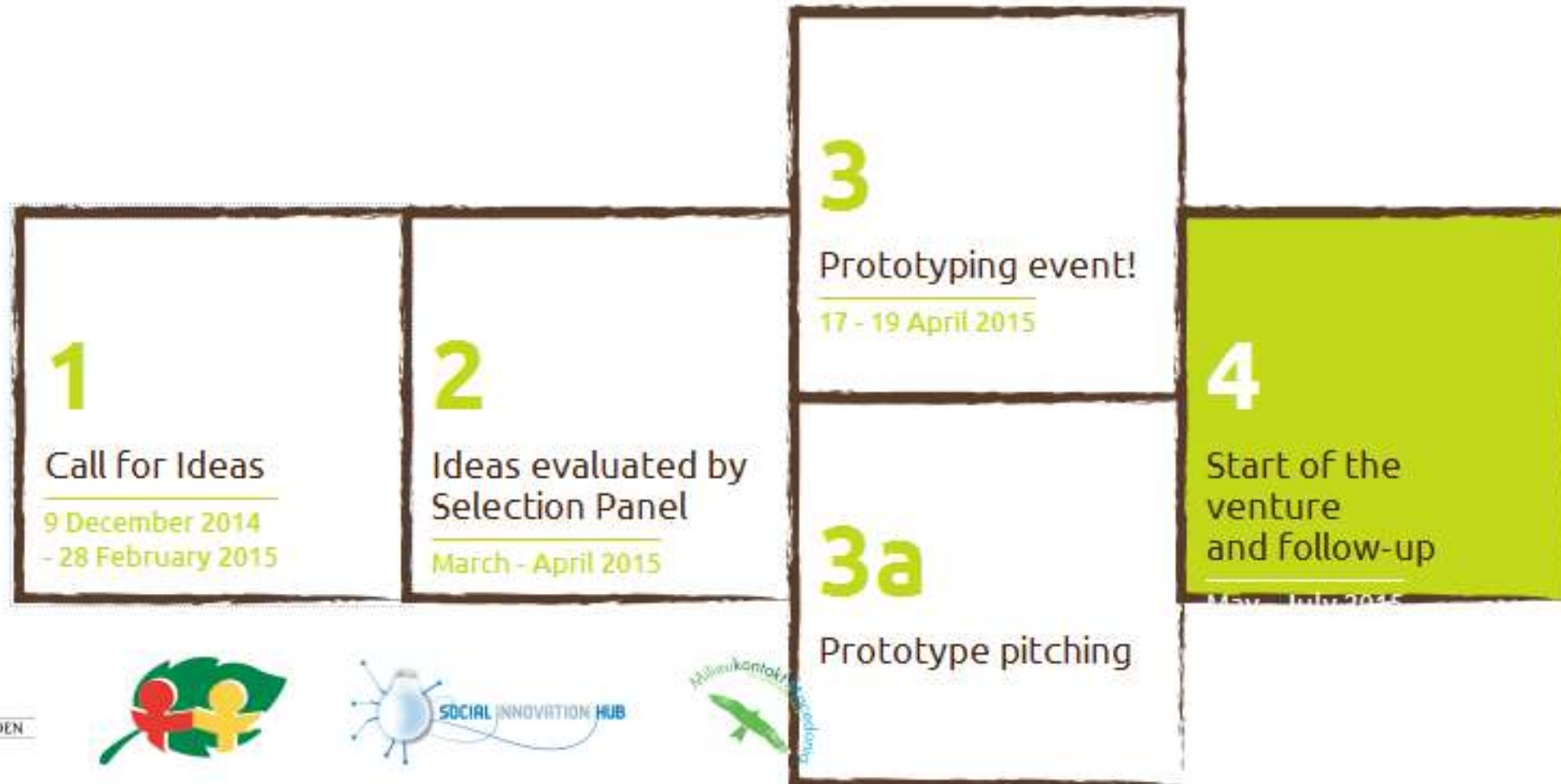
# The numbers behind the challenge

- **2** months campaign involving celebrities
- Huge response on social media
- Over **200** media reports
- Over **30,000** visitors to the website
- **129** applications received
- **10** finalists
- **2** winners





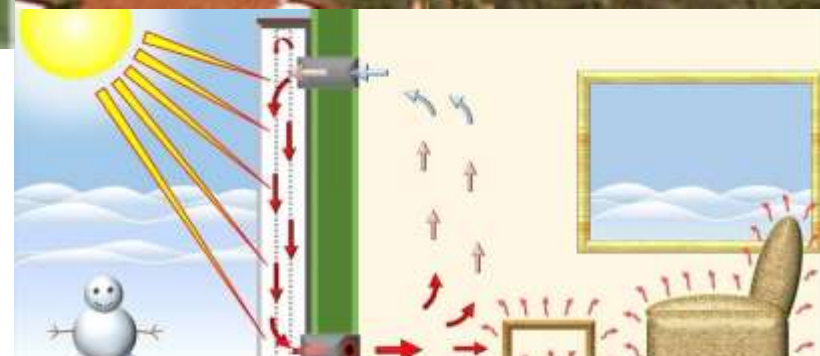
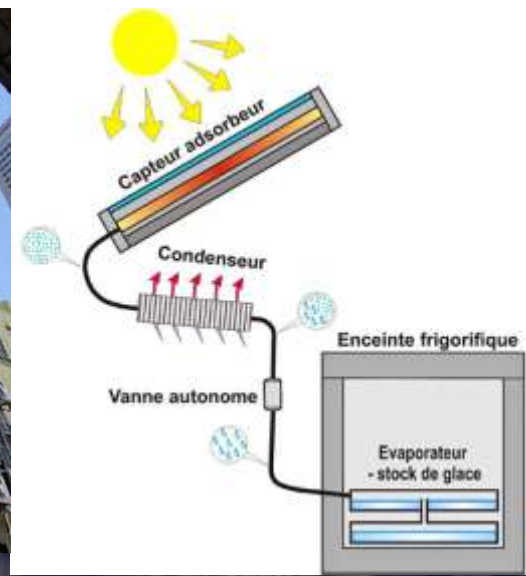
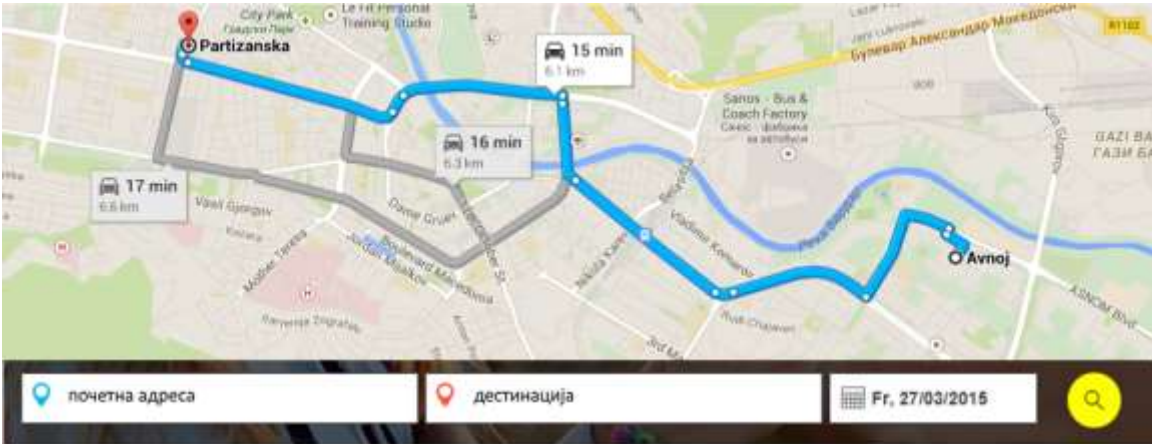
# The process and the Partners



PARTNERS



# The ideas



# The winners

- Viral videos

# СВЕТИЦЕ!



Smart shoes



# Links

- [Storify](#)
- [Climate change challenge: #ОдТебеЗависи](#)
- [From sun solutions to climate cafés: Nationwide campaign taps into local talent](#)
- [Phone-charging shoes? Toto, we're not in Kansas anymore](#)
- <http://odtebezavisi.mk/home/>
- [www.klimatskipromeni.mk](http://www.klimatskipromeni.mk)



#ОдТебеЗависи

# Follow up

- Direct benefit - Cooperation with French Embassy related to COP21 (innovative ways for raising awareness of media and citizens)
- Additional funds mobilized (app.70,000\$)
- High interest on the ideas in the country and abroad
- Provide continuity to stimulate citizens to come up with new ideas
- Contest for the journalist – best climate change story
- Contest for the citizens – best climate change picture
- Crowdfunding

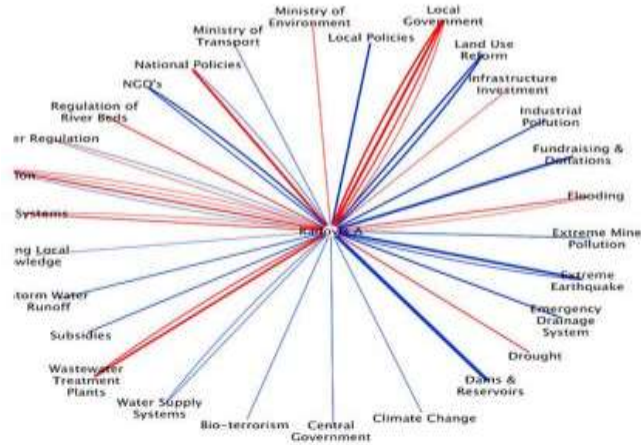


#ОдТебеЗависи

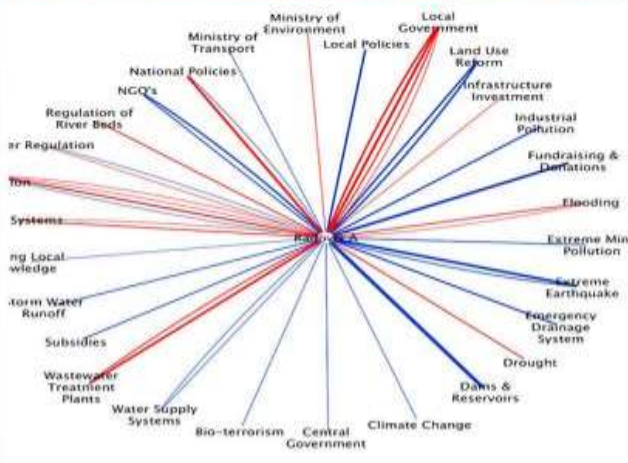
# Resilient Skopje – Climate Change Strategy for the City of Skopje



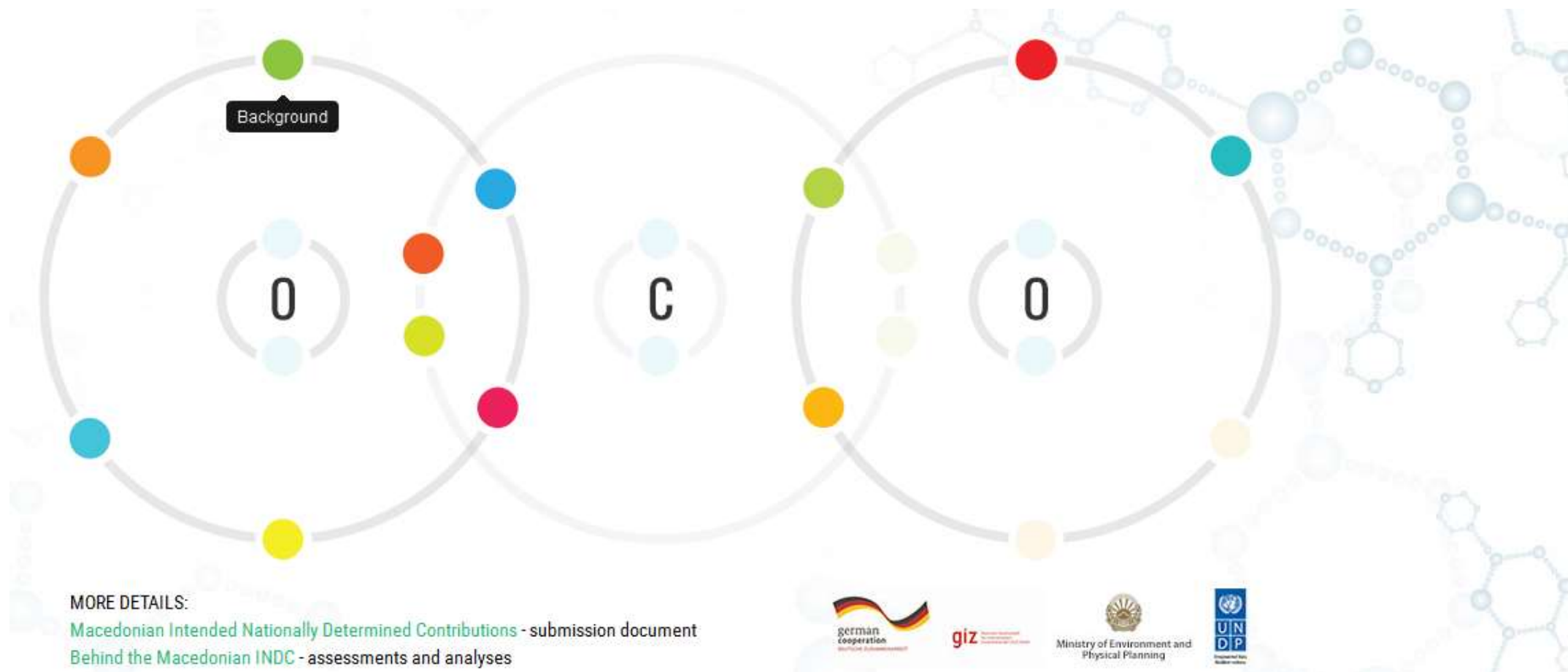
# Public Participation in project design and implementation



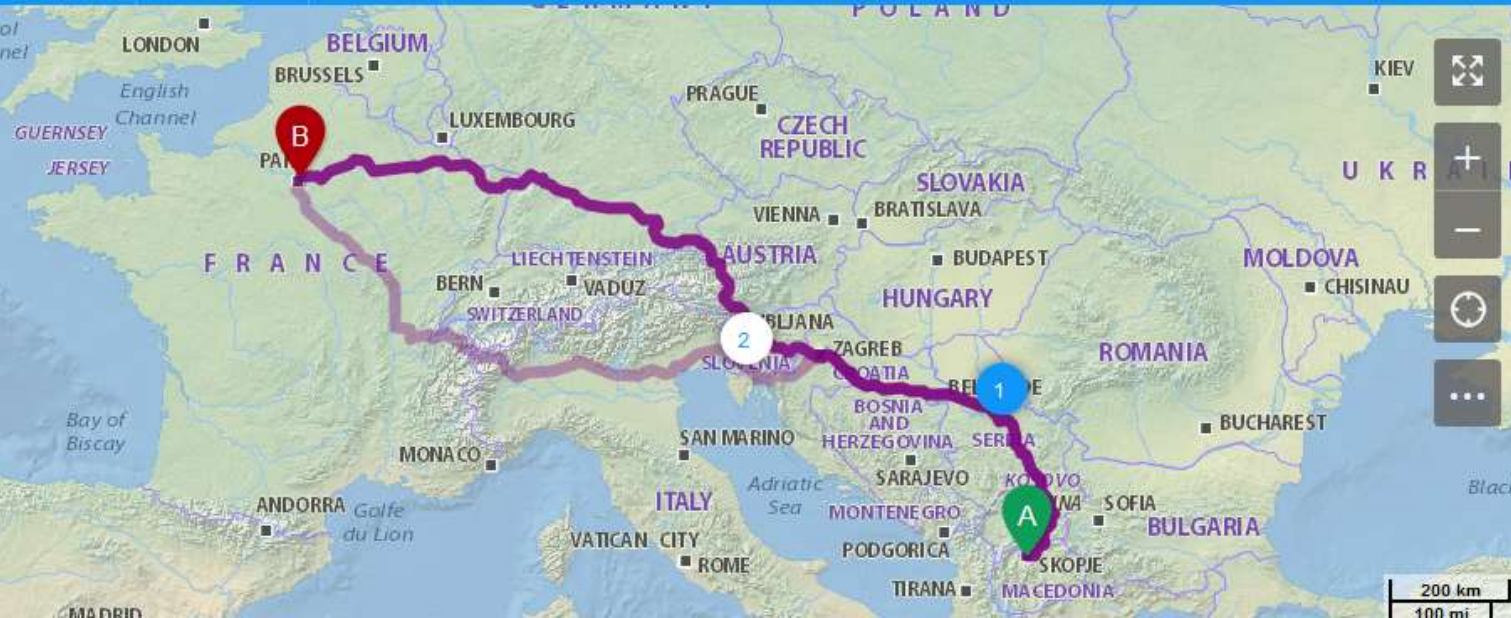
- **15** workshop
- Huge social media campaign
- App. **1000** participants
- **3** priority sectors identified



# Macedonia's Journey to Paris







# Route planner: The Macedonian INDC

- Starting point:** Greenhouse gas emissions from the energy supply, buildings and transport sectors account for almost 80% of the country's total emissions
- Traveller:** A high-level Macedonian delegation on behalf of app.2 million citizens
- Destination:** Paris 2015 Conference
- Mid-point:** The EU (as an EU candidate country, we have to take the EU level of ambition into account)
- 2 possible routes:** A 30% reduction of CO<sub>2</sub> by 2030 (or 36% at a higher level of ambition) compared to the business as usual (BAU) scenario
- Time:** By 2030
- Costs:** 260-280 million Euros per year (approximately 2.2% of national GDP)
- Favour:** Social aspects: by implementing energy efficiency measures in buildings and by introducing low-carbon energy supply technologies, about 6,000 green jobs can be created by 2030.
- Avoid:** Business as usual scenario

# Thank you

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