

H2020 project results

Norbert Ligterink

Ambition



To reduce the **overall pollutant emissions** of the existing vehicle fleet by providing vehicle users with simple, insightful, and effective tools to decrease their individual emissions and to support stakeholders with an interest in local air quality in selecting feasible intervention strategies that lead to the desired user behaviour.

The general objectives and routes



- Dissemination of relevant vehicle emission information
 - Completeness, clarity, relevance, suitability, and fun
 - Full spectrum of information, tuned towards specific vehicles and user actions
- Car users and owners were never easily to involve and convince
 - Central role for local stakeholders is essential in effective campaigns
 - COVID-19 pandemic makes this "double" or "linked" outreach difficult
- Realistic results using the results of pilots with participants

Consolidation and dissemination



- ERMES, HBEFA, COPERT, VERSIT+, non-exhaust, etc.
 - All experts in the same room to combine the knowledge.
- Individual vehicles, specific emission behaviour
 - A shift from averaging and modelling has proven difficult.
- Mitigation measures available to users
 - A new view on vehicle emissions, with the tendency to divert to eco-driving.
- Solid evidence
 - Based on data, supplying data, models and data separated
 - Allowing comparisons from vehicle to fleet levels

Augmented Emission Maps



• Standardized emission data for modelling, evaluation, and comparison



CO₂ and NOx reduction potentials for real vehicle drivers



- NOx and CO2 emissions are correlated but higher reductions can be achieved for NOx
- The maximal reduction potential seldom achieved. Balance between different emissions.



What people can and do



You Can Always Reduce Emissions

because you care

	Start your car without prior heating of the engine	Accelerate smoothly rather than harshly Shift to a higher gea very quick	Keep a Ir constant ly speed	Consistentl accelerate hard while driving	Anticipate ytraffic flow and signals to avoid hard braking	Keep the engine running even if you stop longer than 30 seconds	Use the cabin air conditioner regardless of the weather	Make sure that the tyres have the correct inflation pressure	Make sure that the condition of the tyres is correct	Make sure that the right type of tyres is used	tAvoid unnecess ary driving	Keep a constant speed	Consistently accelerate hard while driving	Anticipate traffic flow and signals to avoid hard braking	Accelerate smoothly rather than harshly
Start your car without prior heating of the engine															
Accelerate smoothly rather than harshly															
Shift to a higher gear very quickly															
Keep a constant speed					_										
Consistently accelerate hard while driving															
Anticipate traffic flow and signals to avoid hard braking	-,399*		,336*	-,383*		1									
Keep the engine running even if you stop longer than 30 seconds															
Use the cabin air conditioner regardless of the weather															
Make sure that the tyres have the correct inflation															
pressure										_					
Make sure that the condition of the tyres is correct								,789**							
Make sure that the right type of tyres is used	-,355*									,,]				
Avoid unnecessary driving		,508**					-,549**			,344*			_		
Keep a constant speed					,643**			,357*						-	
Consistently accelerate hard while driving				,412*											
Anticipate traffic flow and signals to avoid hard braking	-,355*	,385*			,632**							,475**			
Accelerate smoothly rather than harshly			,351*	-,589**									-,419*		
You care about the environment but wish you could do more to help						,349*									
People close to you think you should practice ecodriving								,545**	,556**						
You believe that your own efforts to drive more eco friendly will do nothing to improve the environment		,455**													
You intend to practice eco driving in the next four months			,346*	-,368*	,347*					,376*				,352*	
It is possible for you to practice ecodriving	-,415*									,367*				,439**	
Age		,432*										-,357*			
Gender								,514**	,418*						
Year of driving license											000+	100**	,428*		-,372*
Annual km per year											-,338*	,433**			

**. La corrélation est significative au niveau 0.01



Available for use



- See project website: Project ucare (project-ucare.eu)
- Videos (citizen science, information, instructions)
- Data (emission maps, vehicle-engine classification, etc.)
- Tools (data handling tools, emission model, etc.)
- Instructions, course material, infographics
- Effects of user campaigns on the users and the environment

Final event (on-line) on 25th of October in the morning



Consortium partners:



