Partnership being defined**

**Policy obiective - Greener Europe- axis 2 -**

**specific objective 2-VIII - Sustainable urban mobility for zero carbon economy**

**Policy obiective. More connected Europe.** **axis 3**

**specific objective 3-II Sustainable, climate resilient, intelligent and intermodal national, regional and local mobility**

**Project Idea**

**Dal Costo delle città delle auto ai benefici della città intermodale della bici e della gente**

**From the cost of car to the benefit of intermodal city, for bicycles and for people**

**Background / Throughout Europe the contrast between two ways of experiencing cities is still very strong:**

• **Green city of Europe:** High rate of cycling and pedestrian mobility, on public and multimodal transport.

*More and more extensive pedestrian areas, widespread and attractive cycling (now reinforced by e-bikes, and micro-mobility), combined with the presence of fast and frequent public transport, favor an active and healthy lifestyle.*

*And the phenomenon of multimodality emerges, with "Dutch style cyclostations” that transform up to 70% of commuters into "last mile" cyclists, for whom the comfort of the "train + bike" is a winner compared to the stressed times of commuting by car ..*

(20% car, 30% public transport, 30% bike, 20% on foot).

• **City of cars:**

*The car often covers more than 60% of urban journeys, thanks to a busy road network and unable to guarantee safety conditions for "vulnerable" mobility. More than 80% of commuters often arrive by car from the hinterland, thanks to the inadequacy of public transport*.

(60% car, 15% public transport, 5% bike, 20% on foot)

It is well known: they are metropolitan cities that have grown in the last 30-40 years, thanks to the new travel opportunities provided by mass motorization ... and now drowned by the quantity of cars arriving daily from the hinterland centers.

• Congestion phenomena extend from urban centers to suburbs, on roads often on the verge of congestion, with very slow car and bus journeys, high accidents, CO2 emissions, constant parking shortages, reducing the quality of urban life.

• In the "*city of cars*", the use of bicycles and micromobility, as well as the habit of using public transport, are poorly motivated, and often made completely inadvisable by the insufficiency of vulnerable mobility infrastructures, within a road network built in a “*car only vision*”, and the low frequency of transport services, which in turn are conditioned by urban traffic.

• These are urban organisms that increasingly lose urban attractiveness and quality: a sort of "*arteriosclerosis of cities”,* where the cure would be precisely the reduction of fats (*in the amount of cars)* in the blood (*in the streets*).

• In these realities, public transport is considered extremely onerous, while the possibility of a modal rebalancing, with a considerable increase in users, is considered almost impossible (*yet the European experience shows, on the contrary, the very high profitability of strengthening actions of a Public Transport capable of competitiveness with respect to the Auto Planet, and the effective reduction of expenses linked to the thousands of km that one is forced to travel by car every day*.

• Unfortunately, these are “*sick cities*”: where even the assignment of a very modest section of the carriageway to cycling can aggravate an already compromised traffic, generating further congestion, and real reactions of "rejection" by that "people of auto” for which the search for parking is a constant component of daily life.

Thus, the need emerged to develop an **Action Plan for Modal Rebalancing,** which completes the indications, often already present in the debate on Sustainable Urban Mobility Plans, from an operational point of view.

A mix of interventions aimed at effective increases

* in the shares of cycle and pedestrian mobility
* on public transport and intermodal mobility (*train + bike, bus + bike, car + bike*)

in particular where a road space monopolized by car rights contrasts the transition to the “*the City of bikes and people”*.

Action plan to be supported by a *"Multi-European vision*”, where the "*Peer Review method*” can facilitate the development of suggestions, the identification of system errors, best practices to be extended and completed, priorities.

**Action plan supported by an important budget, initially estimated in the order of 10% of the diseconomies produced annually by the CITY OF CARS**.

And with very high profitability, punctually measurable starting from the wealth produced by the progressive implementation of the modal rebalancing strategy, and by the progressive reduction of the millions of km traveled daily, in our cities, by hundreds of thousands of vehicles.

**STEP 1: UNDERSTAND THE ENORMITY OF THE ECONOMIC AND ENVIRONMENTAL COSTS OF CAR cities**

In this battle to reduce the use of cars in urban areas to less invasive dimensions, important help comes from economic analysis, and specifically from the development of a useful tool to understand the enormity of the costs of the car’s cities.

* allowing each administrator, each technician who has knowledge of the traffic flows that cross his city to realize the immensity of resources annually subtracted from household consumption.
* and the economic benefits associated with an effective strengthening of active mobility, public transport, intermodality, at the same time reducing CO2 emissions.

The model already developed by the Project secretariat will allow each Partner to estimate the immensity of resources annually subtracted from household consumption, to be destined for the Auto Planet.

To this end, it will be sufficient for the Partners to assume, from SUMP or traffic studies, the data relating to the hundreds of thousands of "*commuter cars*” that invade the city center every day from the various directions, obtaining a prudent estimate of billions of km traveled annually.

* *For each model of car and for each power supply, the expense related to the use of the car can be easily assessed, on the basis of the mileage reimbursement granted to those who use their car for the purposes of the company: reimbursement including not only fuel, but of the total cost of the car: fuel, purchase, maintenance, taxes, insurance, accident risk ...*
* *For our purposes, this analysis does not appear necessary: ​​it will be enough to assume the cost \* km at a small average engine size (€ 0.35-040 \* car \* km) to obtain a first, prudent evaluation of the cost of the City of Cars (of the wealth generated from the cities of bicycles and people, if you have the data of the past!) ...*

Even without taking into account the recent fuel increases, the estimates made will surprise: but these are hundreds of thousands of cars that converge every day on urban centers, from the hinterland: even assuming very limited average daily mileage, in the order of 20- 30 km / day, values ​​in the order of HUNDREDS OF MILLIONS OF EURO / year will emerge.

* *Understanding the enormity of the costs incurred by Families living in the City of Cars will allow us to measure the wealth that could be generated, from the transition to sustainable mobility, with the progressive reduction of the daily use of cars (often 2-3 cars per family!), gradually replaced by a greater use of cycling (on short urban distances), public transport, multimodality.*
* *And to size a Budget specifically dedicated to this transformation strategy of daily mobility, in the order of 10% of the annual expenditure dedicated to Planet Cars.*

If the goal of the "mobility challenge" is progressively achieved, in a few years important economic benefits will be generated, leading to well-being and essential consumption a significant portion of the expenditure of families forced, today, to "car-only" mobility.

**STEP 2 - TOWARDS THE ACTION PLAN FOR MODAL REBALANCING: THE CONTRIBUTION OF THE PEER REVIEWS, WITH THE INVOLVEMENT OF NEW MOBILITY CHALLENGE PROFESSIONALS, NGOs AND LOCAL STAKEHOLDERS.**

In the face of the hundreds of millions of € that families are annually committed to pay to the City of Cars, the very high profitability of the modal rebalancing massacre emerges, where it is effectively capable of reducing the daily dependence on private vehicles.

Therefore, there should be no particular difficulties regarding the possibility of assigning an important budget to the *"Action Plan for Modal Rebalancing*", in the order of 10% (therefore tens of millions of euros) of the annual cost incurred by those who live and work in the City of Cars.

But as we know it is also possible to spend large sums, without obtaining important results.

*And in fact, against this transition to sustainable mobility, there are many system errors, ancient habits, intellectual laziness, road signs designed in historical times without any attention to vulnerable users, technical and political personnel who have always been engaged in "mobility only auto, few buses ”, which still would not bet a cent on the possibility of realizing, in the next decade, an effective reduction in the use of cars, in cities built for this purpose!*

*Yet those who have lived the experience of international cooperation, even in just one of the many INTERREG EUROPE dedicated to the new sustainable mobility, can confirm the simplicity of the increasing diffusion of urban mobility models in Northern, Southern and Eastern Europe starting with the historical Best Practices Dutch and Danes (Amsterdam, Copenhagen, Delft, the exceptional Groninghen, but the list would be very long!).*

*And the urban value of the modal rebalancing strategies, where pedestrianization, multimodality, daily mobility by bike have changed and enriched cities: the surprising simplicity of these urban structures invites us to dare !!*

*... and to start a mobility challenge path also in those cities where more than 80% of commuters arrive by car from the hinterland, (thanks to the actual weakness of transport), and where those who ride a bike must every day choose between suffering high levels of risk, and the relative tranquility of the car.*

Compared to the past, the novelty is that it may be an operational plan, the profitability of which is demonstrated starting from the enormity of the diseconomies produced annually by the City of Cars.

A plan that can be supported by a large budget, in the order of 10% of the resources already dedicated by families to the car planet (in the metropolitan area of ​​Cagliari it would be 80 million euros !!).

A plan dedicated to implementing intervention lines and priorities perhaps already identified in the SUMPs, extended to the entire multimodal strategy: *new pedestrian streets, widespread cycling and attractiveness over small urban distances, doubling the frequencies of Bus and Train, Train + bike, Dutch-style cyclostations, new subway lines*.

* Sustainable mobility plan over small urban distances, (*safety and comfort of cycling in the most important urban roads, metropolitan cycling routes through urban parks and green areas, cycle stations to transform thousands of commuters into urban cyclists, doubling of crowded buses and trains, bus diffusion at night time .*.)
* Strengthening plan for public transport over distances beyond 5-10km (*transport services adapted to the growth of multimodal mobility: fast, comfortable, not crowded, frequent buses and trains, possibility of last mile by bike / micromobility*).

The Peer Review method, with the involvement of NGOs, Stakeholders, mobility challenge technicians from cities also involved in the challenge of modal rebalancing, can significantly consolidate this strategy, assuming from the experience of other realities, *equally committed to rebalancing modal*, indications and suggestions for the definitive elimination of too many elements to contrast the growth of zero-emission mobility.

* Deepening the "*bad practices*" and "*system errors*" of the mobility strategy implemented so far, often in a "*car only vision”*, which has always been lacking in attention to pedestrian and cycle mobility...*often considered to be of lower rank in the allocation of road space, where for example the lane dedicated to public transport prevails over the need to ensure the safety of cycle paths on all important roads.. Or the practice of interrupted cycle paths, which get lost at intersections, in traffic*
* Deepening, also in the light of the Partners' experience, the service standards of public transport, and the ways to increase its attractiveness (*for example the experimental doubling of frequencies on the most crowded lines, the launch of night races, intelligent traffic lights / traffic light priorities).*
* By verifying the actions dedicated to multimodality (*the results of the bike sharing, compared with those cyclostations of 4,000 bicycles, which in Northern Europe transform most of the commuters into last mile cyclists*).
* Identifying in the "experiences of the Others" best practices to be duplicated, extended, perfected (*for example metropolitan cycle paths capable of attracting significant user shares, perhaps crossing urban parks and green areas; an attractive cycling viability on most of the network road; the assignment of bus lanes to cyclists, in case of free-flowing traffic; pedestrian and cycle mobility meters; the boxes dedicated to the storage of bikes; traffic light priorities for trams and buses; cyclostations and supporting commuters services; the doubling of the frequencies of trains and buses… starting with the most crowded lines).*

**With the novelty of being able to verify, year by year, the actual growth of the Mobility Challenge, based on the results achieved in terms of modal rebalancing, and reduction of cars in the city**.

**STEP 3 - KNOWING TO ACT BETTER: THE ANNUAL MONITORING OF THE MOBILITY VECTOR FOR THE SUCCESS OF THE MODAL REBALANCING STRATEGIES:**

It is certainly necessary to deepen the study of commuter gravitations: of how much and how one travels, of the greater / lesser propensity to use public transport, or to active mobility, on the different directions.

For this purpose, the official statistical data relating to the increase (*or decrease!)* of commuter users in the various directions is an important tool, sometimes not fully exploited, to understand how high levels of motorization are immediately correlated to the quality and comfort guaranteed by the public transport, or soft mobility infrastructures.

The secretary of the Project will in fact take care to collect and report best practices and methodologies useful for understanding the *how*, the *how much*, the thousand "*whys*" of daily journeys.

But alongside the official statistical data, the Project intends to develop a further simple tool to understand the prevailing modes of movement (*along the most important directions and towards the main attractors*): an annual survey, for which factories, offices and schools will be able to ask their employees to participate.

The response processing activity can be assigned to a "*Mobility Challenge Observatory*" in charge of one or more partners participating in the project, thus favoring the immediate operation of the monitoring system

**STEP4: MEASURING THE SUCCESS OF THE MODAL REBALANCING STRATEGIES: TOWARDS THE MOBILITY CHALLENGE OBSERVATORY.**

The repetition of the survey on an annual basis will allow the formation of a large audience, capable of contributing to the evaluation of the effectiveness of the different actions, and at the same time of confirming (*or not confirming!)* the trends towards less use of the car, and effective modal shift towards the city of public transport, bicycles, and people.

From year to year, in parallel with the implementation of the modal rebalancing strategy, it will be possible to refine and better finalize the questions on travel habits, and on the effectiveness of the different interventions.

In this way, the development of the "*Mobility Challenge Observatory*" can become an essential component of the European Modal Rebalancing Strategy, allowing to verify, in each partner reality

* the growth in the number of commuters who normally travel with zero emissions (on foot, by bike or on micromobility) or on public transport, or in multimodality.
* the decrease in the kilometers traveled annually by millions of cars, and in the costs borne annually by the "car community".
* the contribution to the objectives of energy saving and CO2 containment.
* increasing the quality and well-being of urban environment, and tourist attractiveness,
* the actual economic profitability of the Mobility Challenge strategy.