## Decarbonising transport by 2050

A TDA manifesto on how to reach net zero emission mobility through uniting Countries, Cities / Regions and Companies



As the latest report of the Intergovernmental Panel on Climate Change (IPCC) clearly shows, time is of the essence: we should not only get to net zero Greenhouse Gas (GHG) emission to limit global warming below 1.5°C or 2°C, but also need to get there fast.

Achieving a resilient "net-zero-emission (NZE) economy" by 2050 requires us to collectively and successfully transform global mobility in a systemic manner over the next decades.

With transport emissions set to possibly increase by around 50% between now and 2050 (Reference Technology Senario of the International Energy Agency), while they should decrease by over two thirds in a below 2°C scenario, rapid and transformational action is needed, as well as strong coordination.

This manifesto crafted by TDA is intended to serve as a call to action for Countries, Cities/Regions and Companies (the 3Cs) to join hands and kickstart the decarbonisation of the transport sector. The document proposes feasible solutions that the 3Cs can adopt to reach their objective. It seeks to act as the living backbone of TDA's action. It will be enriched further, progressively, in the months and years to come.













The document identifies solutions and levers to reach net zero emission-mobility by 2050, and showcases best practices that can foster the adoption of the right combinations of solutions through collaborative approaches. Such best practices rely on:

**4 strategic imperatives** for reaching GHG-neutral mobility, guiding all actions synergistically and leveraging ASI (avoid-shift-improve) initiatives:

**Imperative 1** Move away from oil and other fossil fuels to focus on very-low-GHG energy

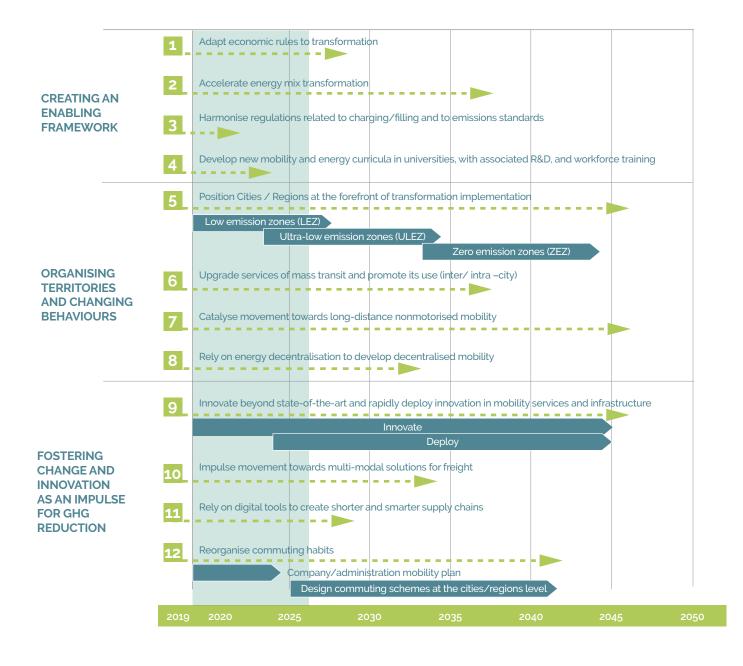
Imperative 2 Lower the energy intensity of our mobility patterns (global economy & individual lifestyles)

Imperative 3 Prepare the physical and IT infrastructure needed to accompany those changes

**Imperative 4** Inform, educate and train populations to embrace the transformation

**12** pillars of transformation to activate levers in synergy and create favourable economic, technical and social conditions for the transition.

Those twelve pillars of transformation have to be phased in order to reach net zero emission-mobility. The illustration below highlights how they should complement each other in the next decades:



The manifesto also proposes a framework for the 3Cs to create and maintain an unprecedented level of coordination, and enable large scale initiatives. This framework is built around:

**4 enabling prerequisites** that represent the actions and attitudes necessary to act quickly and overcome existing or future roadblocks, bearing in mind that getting there is no easy task:

**Prerequisite 1** Anticipate shifting effects

Prerequisite 2 Avoid inflexible approaches and make informed decisions

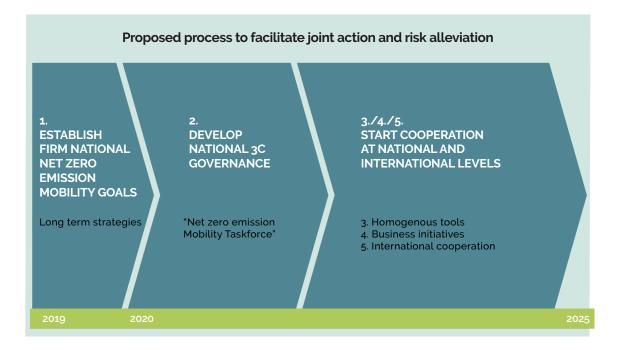
**Prerequisite 3** Challenge all arguments for postponement

Prerequisite 4 Adapt the fiscal and regulatory environment to foster transformational investment

## A five-step process to impulse change irreversibly, at the 3Cs level:

- **Step 1** Establish a firm "net zero emission-mobility" target involving all stakeholders in a spirit of irreversible commitment
- **Step 2** Develop 3C governance at the different scales to steer and monitor the transformation
- Step 3 Spread homogeneous, effective tools to orchestrate the transition at the local, national and international levels
- **Step 4** Open up pro-business initiatives to foster new services and new products
- **Step 5** Promote international efforts to speed up the transition globally

Those five steps have to be initiated quickly and orchestrated in time, in order to facilitate collaboration on the twelve pillars of transformation:









## Key takeaways emerge from this manifesto:

- TDA members agree that **net zero emission-mobility by 2050 can be achieved**, if strong, structured action is launched now.
- The key levers for reducing the GHG impact of mobility are all the more effective when activated in synergy something missing until today relying on active cooperation between the 3Cs to create the favourable economic, technical and social conditions, without which the transformation will fail, and helping focus efforts on finding ways to go the extra mile towards full success.
- Adopting a common process framework in this "no return" journey towards net zero emission-mobility is a sine qua non condition for success. The four prerequisites and the five-step process proposed by the TDA, when adapted to local conditions, should immensely help decision makers foster collaboration and accelerate progress.
- "Decarbonising transport" is no solitary endeavour. The TDA urges other Countries, Cities/Regions and Companies to initiate and sustain cooperation. It welcomes actors eager to embark on the transition to join as new TDA members or supporting organisations.

We look forward to welcoming you aboard.







This manifesto was developed by the Transport Decarbonisation Alliance, under the leadership of IPPMG (www.ppmc-transport.org) with the support of the Climate Change & Sustainability team of EY.

TDA members as of December 2018:



Costa Rica



Finland



France



Luxembourg



Netherlands



Portugal



California







Gaia



Rotterdam



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