



Yellow  
design  
Foundation



# CLIMATE EMERGENCY

English



Only 12% of citizens are conscious of the dramatic situation of our planet and changes needed to their behaviour. Many do not understand how the activities of the IPCC (Intergovernmental Panel on Climate Change) relate to urban-heat-impact, albedo, renewable, fossil fuels, zero-emissions, net-zeroemissions, decarbonisation and more.

We shouldn't blame or disdain, but must make a persuasive effort now for tomorrow to reach the tipping point of 25% for social change.

In view of this, Yellow design Foundation (Brussels,B) with the support of ESG matters (Copenhagen, D) attaches a Manifesto suggesting measures that allow citizens to make climate friendly choices.

Here is a list of possible actions. It mainly focusses on mobility, but food, healthcare, fashion, are key issues as well.

# CLIMATE EMERGENCY

## GOVERNMENTS



Make it compulsory for all private companies and public service organisations to communicate their climate contributions and emissions reductions proactively, participatively, understandably and in a user-friendly way. This is not just a post of an expensive and voluntary BREEAM-certificate on the wall, nor the mere implementation of an ESG or CSR-program, but a facts-based program formulated through multi-stakeholder teams with phased and measurable targets.



Make it compulsory for mass transit operators to announce on their website to users/passengers how much CO<sub>2</sub> /NO<sub>2</sub> emissions they avoid per specific journey.



Make it compulsory for gas stations to mention on the purchase receipt the emissions that are released per liter of gasoline or diesel that is burned.



Make it compulsory for manufacturers of household appliances to indicate the power consumption of the equipment they sell, per minute (e.g. coffee-blender, vacuum cleaner) and per hour (fridge, TV, ...). This would be more precise than the current ratings A++, A+, A, ...D



Make it compulsory for water supply companies to allow citizens to monitor their hot and cold-water consumption on a daily basis. Inform them about their price setting from green to red.



Make it compulsory for stores to indicate the carbon-footprint of your purchase per item on your receipt.



Make it compulsory for fashion stores with a clothes recycling program to announce annual volumes of clothes collected and their corresponding recycling and re-use programs.



Make it compulsory for fashion industry to inform customers on the origin and sustainable production of their garments

## EU / NATIONAL GOVERNMENTS



EU/National Governments  
Make it compulsory for national mass transit operators to install and adopt an EU-wide booking system



Discourage car driving:  
Stimulate car-owners to trade in their car, offering them an extra benefit that matches the sales value of the car complemented by another 25% on the condition the old car is taken back by an official car dismantling for resource purposes plant.



Communicate on the cost of car driving and how it impacts:  
+ Purchase cost  
+ Cost of insurance  
+ Cost of maintenance  
+ Cost of gas  
+ Considering cars stand still on average 95% of the time



Stop funding company car programs



Communicate on the financial benefits of transport alternatives: car-sharing, cycling, and highlighting the benefits in terms of public health.



Aviation levy heavy taxes on flights over distances less than 600km  
levy heavy taxes on private aviation targeting control towers' take-off and landing authorisations.



Accelerate the development and make compulsory application of Social Life Cycle certificates



Levy taxes on CO<sub>2</sub> emissions rather than on labour

## MUNICIPALITIES



Dissuade public and surface parking for cars in areas within 100m of a public transit hub, except those on the outskirts of town to facilitate travel combining car with public transportation. Convert the freed-up surface to pedestrian & landscaped areas.



Increase surface parking fees radically in zones within 100m of a public transit hubs. In inner cities stop authorizing building or exploitation permits within 100m of a public transit hub Facilitate MaaS (Mobility as a Service).



Award exploitation permits only to companies, stores, restaurants, bars, etc. with a measurable zero-waste policy.



Promote locally grown food-markets

## CITIZENS



Embolden diversity (gender, culture, economic, social) composed circles of innovation focusing on decarbonisation efforts and promote changes in social behaviour to limit carbon footprint and avoid climate change over 1.5°.

# Decarbonisation



## What can governments do ?

DECARBONISATION MEASURES TO REDUCE A LUXEMBOURGER'S CONSUMPTION-BASED CARBON FOOTPRINT (t CO<sub>2</sub>eq/capita/year)

- halve national car fleet
- 80% electromobility + biogas, fuel cell
- sharing (from 1.2 to 1.6 passenger/ vehicle)
- shift to public transportation

- flights with a <5 hour train alternative banned
- sufficiency: one flight every two years

- smaller living space: from 53 to 35 m<sup>2</sup>/person
- energy efficient housing: from 163 to 110 kWh/m<sup>2</sup>
- fuel oil and gas phase-out

- extend new product lifetimes × 2
- sharing economy (double service/product)
- large-scale second-hand market (product second life)

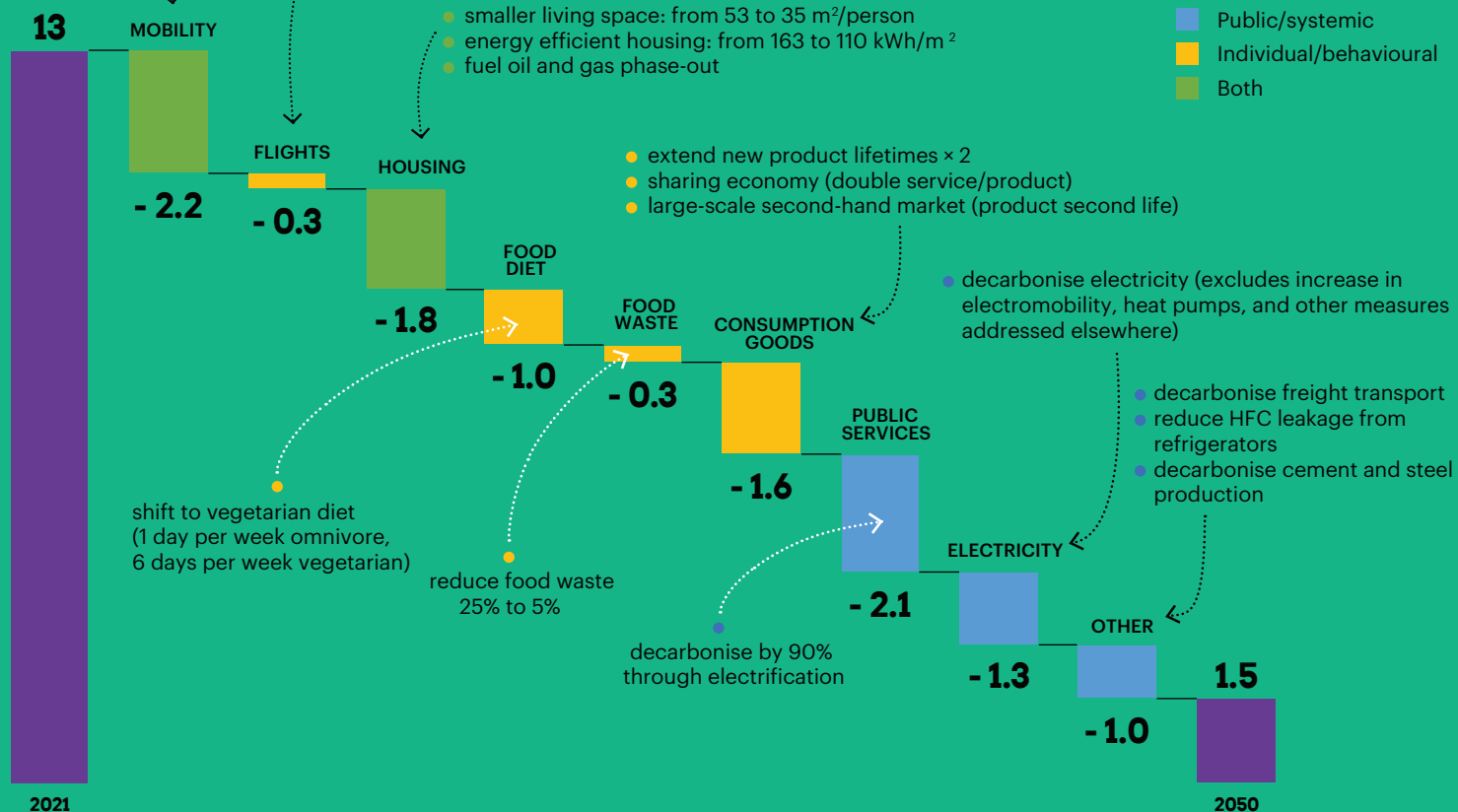
- decarbonise electricity (excludes increase in electromobility, heat pumps, and other measures addressed elsewhere)

- decarbonise freight transport
- reduce HFC leakage from refrigerators
- decarbonise cement and steel production



## Decarbonising by 90%

is an immense task that requires reductions across all sectors. The GHG emission reductions are achieved through a combination of strategies that can be categorised as stemming from individual/behavioural (yellow), public/ systemic (blue) or both (green).



If we rely solely on individual/behavioural change, we fall short of our target and continue emitting 5.9 t CO<sub>2</sub> eq/capita/year.

Similarly, if we implement only systemic changes, we are also left with emissions of 4.7 t CO<sub>2</sub> eq/capita/year in 2050.

The two drivers of change—individuals and government—are thus equally called to action.



## WHAT ABOUT CARBON UPTAKE OR SEQUESTRATION?

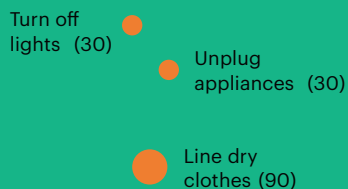
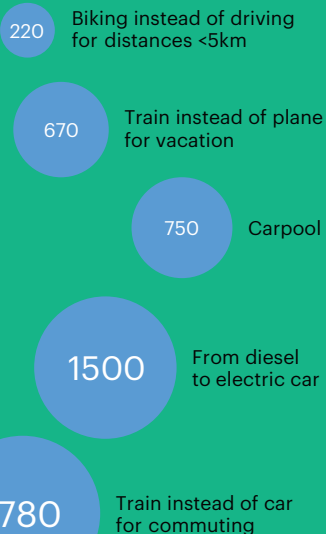
What do we do with the remaining emissions of 1.5 t CO<sub>2</sub> eq/capita/year in 2050? We need to significantly improve our carbon sequestration efforts, such as through re-forestation and improved management of agricultural soils. Two other technologies may help us get to net zero emissions. Carbon capture and storage refers to capturing CO<sub>2</sub> emitted from industrial sources and storing it. Direct air capture, which remains very expensive, refers to capturing CO<sub>2</sub> from the air and storing it.



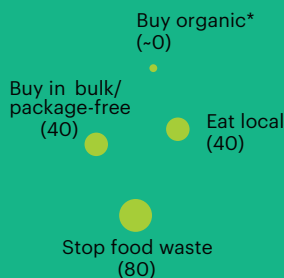
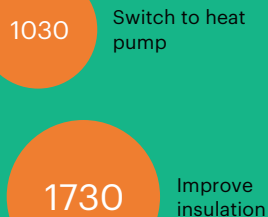
## How can I decarbonise?

Annual GHG emission savings based on a Luxembourger's carbon footprint (kg CO<sub>2</sub> eq/year)

### MOBILITY



### HOUSING



### FOOD



Double the lifetime of smartphone (20)

Reduce movie streaming (30)      Reduce video gaming (30)

### CONSUMPTION

310 Buy 50% fewer clothes  
510 Buy second-hand for 1/3 of stuff

\* Organic farming does not have a significant impact on GHG emissions, but it has other environmental benefits, e.g. for biodiversity.

\* Source: Luxembourg Institute of Science and Technology (LIST)  
Check out LIST's CarbonNerd brochure for more facts and figures

