Strengthen your climate ambitions!

The people have taken to the streets in large numbers to demand more ambitious climate action from the government. As scientists, and on the basis of scientific facts, we declare: **the climate activists are right!** It is now essential to have the necessary discussions and take collective action to speed up the transition to a carbon-neutral society. As an individual, you can already make an impact by eating less meat and reducing air travel, **but more than this, it is now the time to take far-reaching, structural measures to quickly and drastically reduce greenhouse gas emissions in order to limit global warming to less than 2 degrees, and preferably to 1,5 degrees.** Only in this way can we prevent climate change that fundamentally alters the environment on which our lives and societies depend. The idea that climate change will strongly change our world is not doomsaying, but is based on hard facts. Here are the most important points:

- The Earth is warming. Worldwide the average temperature has already risen approximately 1°C (relative to the average temperature between 1850 and 1900).
- 2. Virtually 100% of the measured increase in temperature is attributable to human activities.
- 3. Already with the current warming of 'only' 1°C we are being confronted with more frequent and stronger extreme weather such as heat waves, droughts and floods. As the Earth warms, such extremes will become more common. If the warming rises above 2 degrees, the risk of self-reinforcing climate change strongly increases considerably. This can lead to a type of snowball effect in which the climate gets even warmer.
- 4. It is crucial to limit further climate change and the establishment of self-reinforcing feedbacks. To limit climate warming to 2 degrees, emissions of carbon dioxide will need to be reduced by approximately 25% by 2030 and by 85% by 2050. To keep warming below 1,5°C it is necessary to reduce net emissions to zero by 2050. In order to achieve this we have to take far-reaching structural measures NOW.
- 5. Current policy measures fall far short of what is needed to reduce greenhouse gas emissions. CO₂ emissions are still increasing worldwide – so we are not emitting less, but more and more every year. That is the opposite of what needs to be done. Moreover, the proposed policy measures are still miles from what is necessary to drastically reduce emissions, and that applies at local, Belgian, European and global level. With the proposals currently on the table, the world is heading for more than 3°C warming by the end of the century. That may sound small, but the consequences will be enormous.
- 6. Action against climate change is much more economically advantageous than not taking action. The cost of inaction is much higher than the investment to reduce emissions significantly. Doing nothing leads to enormous costs, including damage from floods, storms and forest fires. Extreme droughts and the resulting food shortages can trigger social conflicts in many countries and lead to global waves of migration. The transition to an emission-free society, on the other hand, is much more economically advantageous and even creates additional jobs. Moreover, direct subsidies for fossil fuels amount to more than US \$500 billion per year worldwide. This amount, or even only part of it, would facilitate the transition to a carbon-neutral society.
- 7. Knowledge and technologies to drastically reduce CO₂ emissions already exist. It now requires first and foremost the political courage to take the necessary structural measures and to fully commit to the transition to a carbon neutral society. This transition will only be possible if, among other things, the supply of renewable energy is rapidly and strongly expanded, buildings become power stations instead of energy consumers, mobility is reformed, deforestation is prevented here and elsewhere and trees are planted where possible, and if the emissions caused by the enormous global livestock population are also tackled. These investments offer the opportunity for positive changes in many other areas

too. Think for example of cleaner air and sufficient food and drinkable water for everyone. Finally, explicit attention to a socially equitable distribution of the costs and benefits of the transition is a necessity to keep an ambitious climate strategy on course. In the event of socially damaging consequences, equitable climate ambitions also require a tightening up of social policy.

It is time for change. And in order to change everything, we need everyone! **The required emission** reductions can only be achieved if well-considered and effective political measures are taken, accompanied by a change in how we behave – both as individuals and as a global community.

#Scientists4Climate

