

Global Footprinting Mechanism

The open-source, full life-cycle, carbon
footprinting mechanism.



Curbing emissions from consumerism remains one of the key challenges in the fight against climate change.

The consumer sector is responsible for a huge proportion of CO₂ pollution worldwide: over 60%. With time running out, the solution needs to readily enable everyone to cut their emissions – citizens, businesses and governments.

THE PRODUCTS WE BUY AND
USE ARE RESPONSIBLE FOR

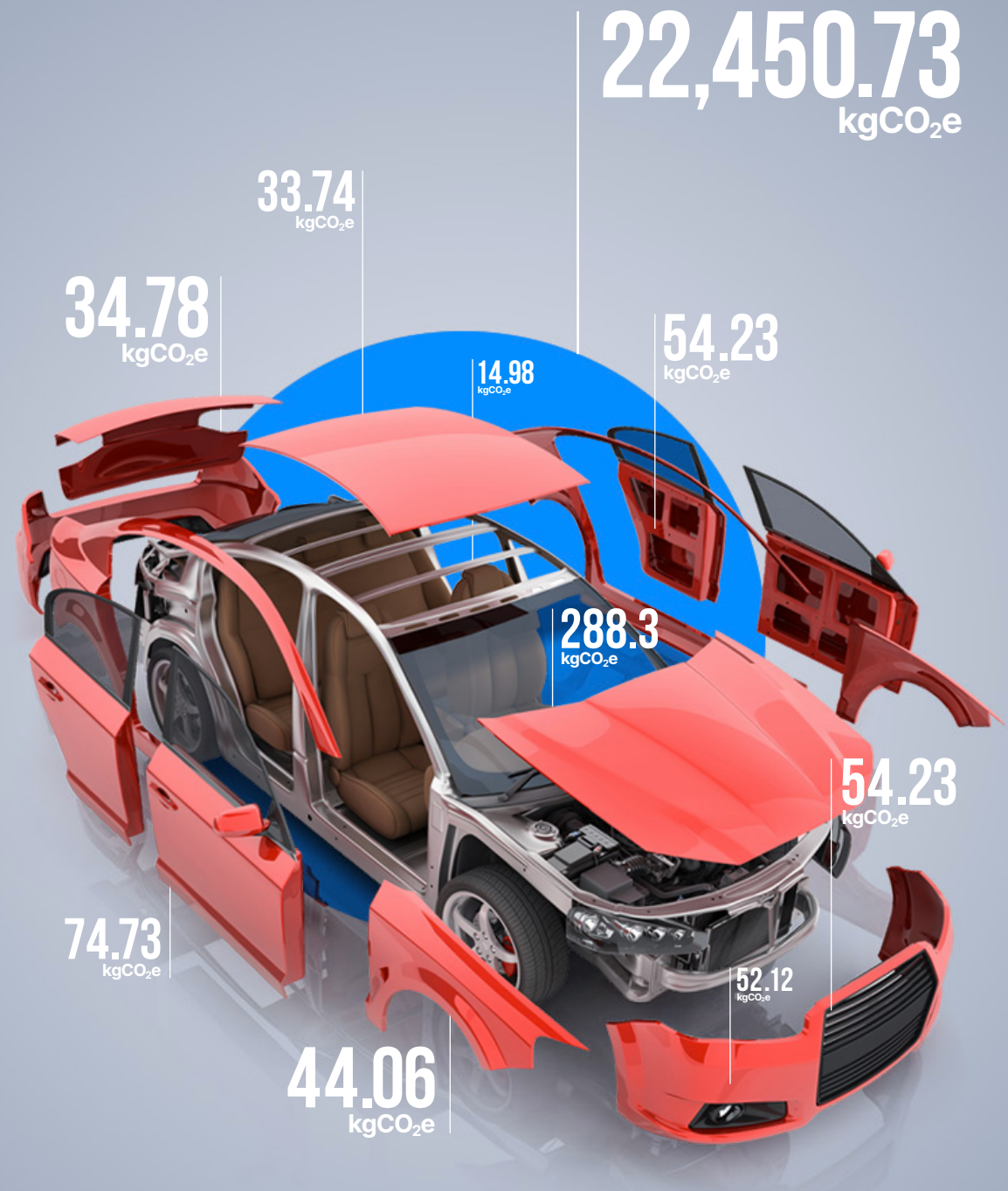
60%

OF GLOBAL GREENHOUSE
GAS EMISSIONS.



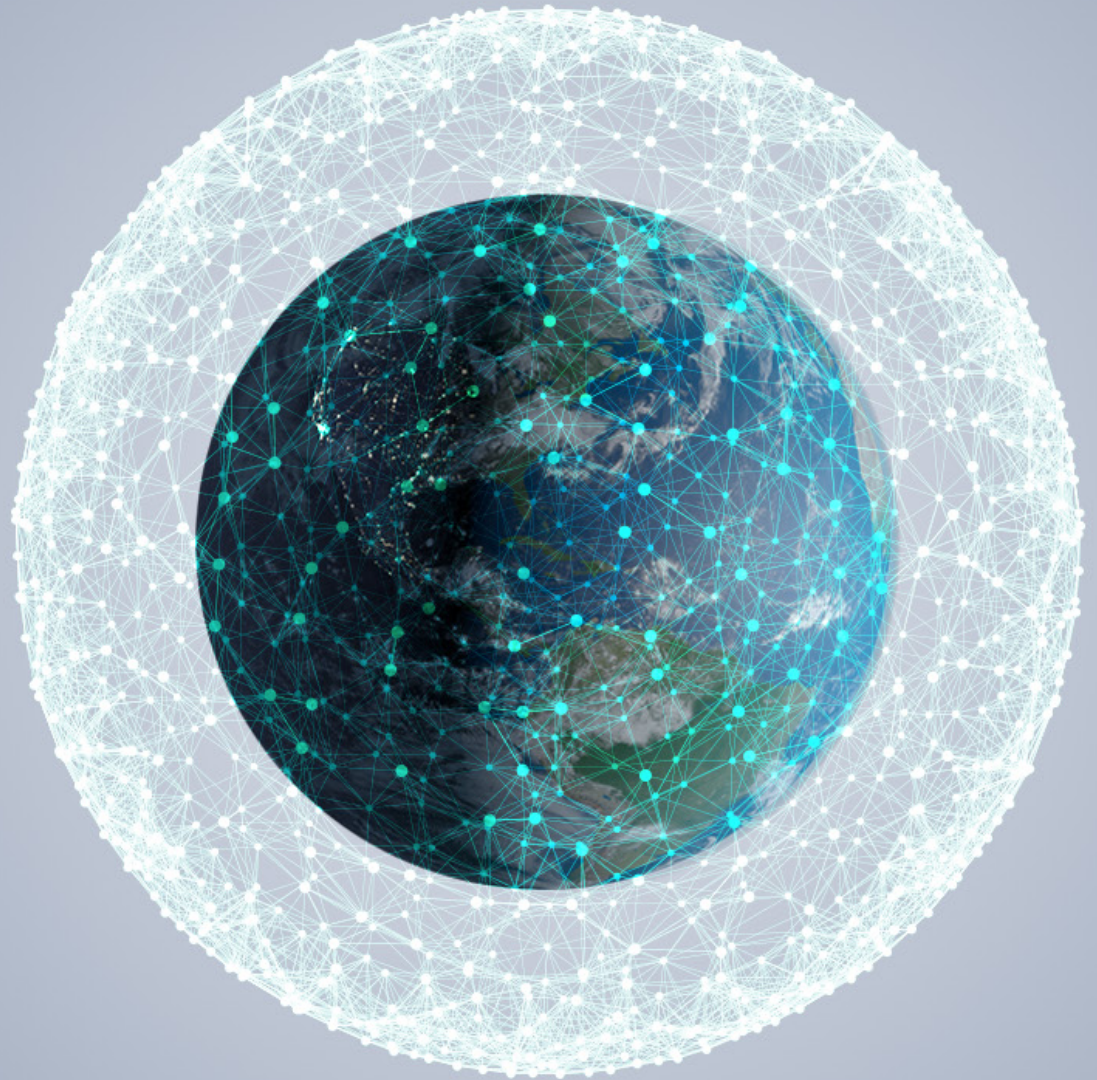
Imperial College London has developed a groundbreaking solution to tackling this problem, on a global scale.

Using AI and Big Data, Imperial has devised a method for calculating the full life-cycle carbon footprints of all consumer goods – instantly.



Now, some of the world's leading organisations are joining forces with Imperial to create a global footprinting mechanism.

Its purpose: to provide open-source, science-based carbon footprints of everything that is bought and sold.



Unprecedentedly precise emission comparisons and accurate ranking of products and services are now within reach.

The Global Footprinting Mechanism's highly complex task of analysing and calculating the emissions of goods – to a level of accuracy that will enable comparisons to be made between products which would otherwise appear almost identical – will be achieved by coupling Big Data with the phenomenal breakthroughs in AI and Machine Learning which allow software to learn from experience, adapt to new inputs, and complete tasks at extraordinary speed.

16.46
kgCO₂e

14.71
kgCO₂e

17.55
kgCO₂e

18.62
kgCO₂e

18.42
kgCO₂e

Calculations shown are for illustrative purposes only.

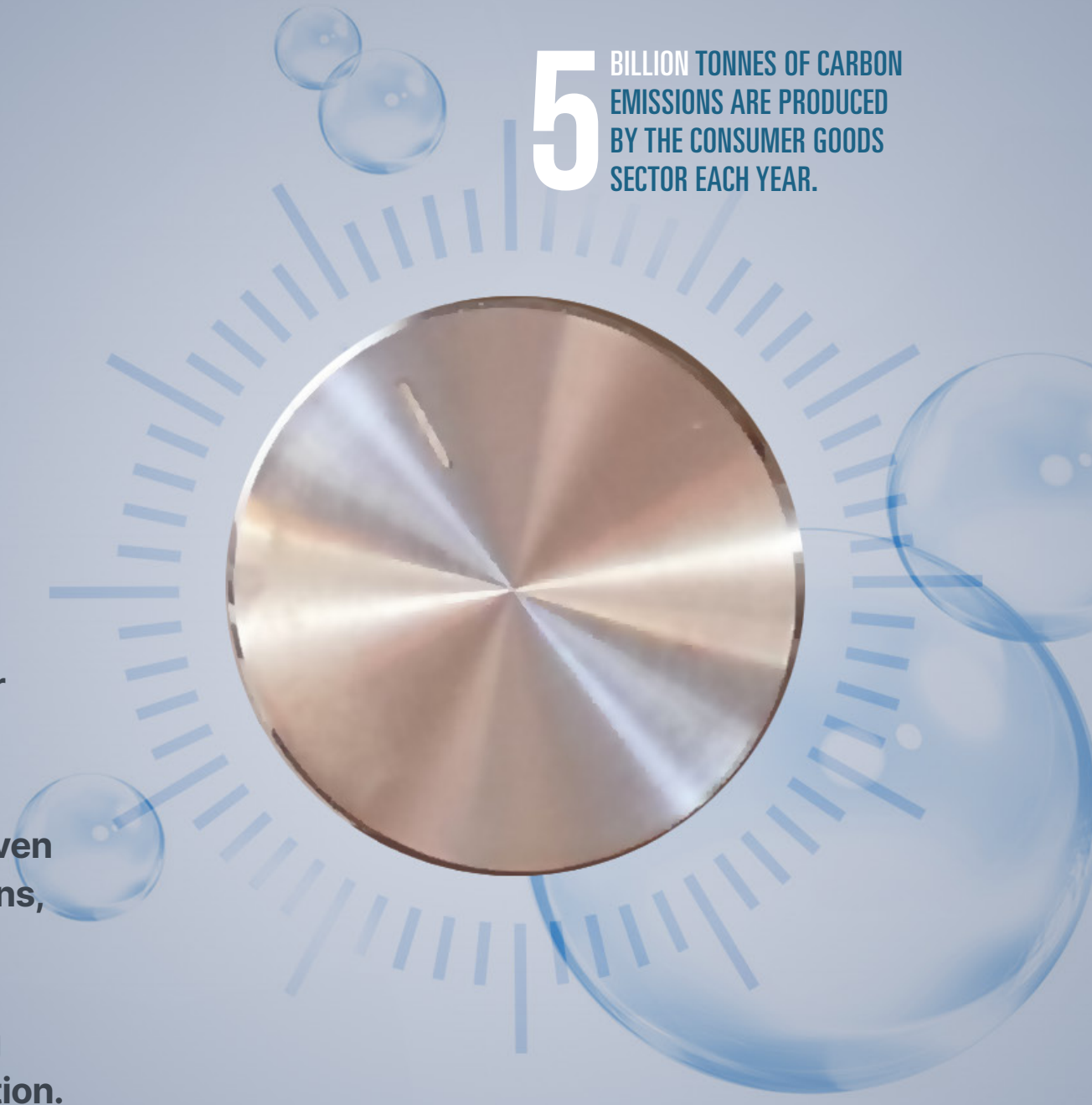
A footprinting mechanism for all. Citizens.

We can finally provide an answer to the challenge so frequently put to climate change leaders by concerned citizens, namely: “Tell us what we can do.”

With the mechanism’s calculations integrated and products thus ranked on, for instance, e-commerce marketplaces and search engines, the 1.8 billion people who currently shop online could use their combined purchasing power to make significant cuts to emissions.

Furthermore, once the mechanism is proven to successfully calculate carbon emissions, the same model could be extended to calculate how ecological products are in terms of, for example, sustainable fishing and farming, packaging and plastic pollution.

5 BILLION TONNES OF CARBON
EMISSIONS ARE PRODUCED
BY THE CONSUMER GOODS
SECTOR EACH YEAR.



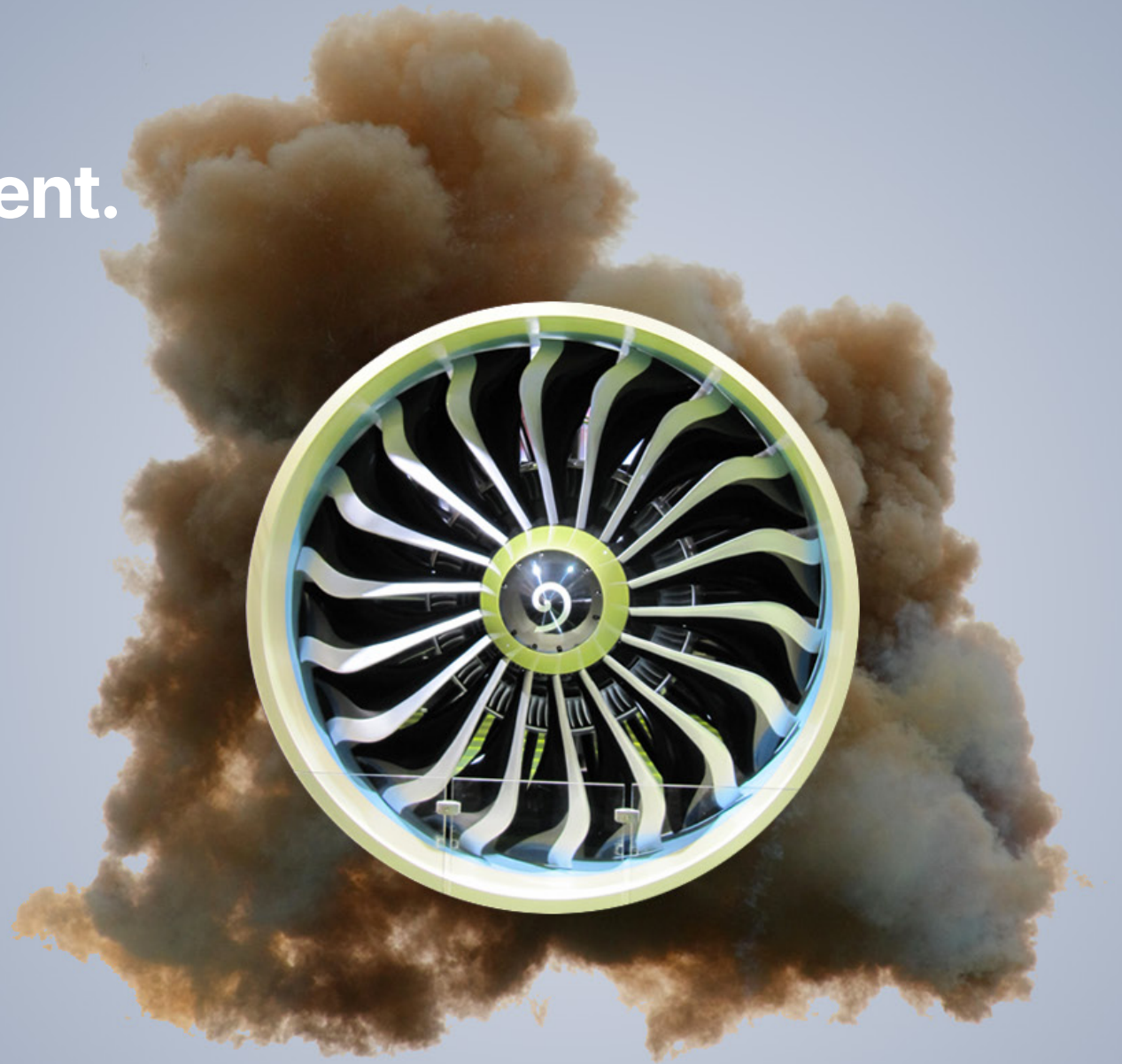
A footprinting mechanism for all.

Business & Government.

By making the calculations freely available for anyone to incorporate in the products, services and applications which they provide, the market economy itself can be utilised to accelerate emission reductions at scale.

Public procurement, which spends over \$9.5 trillion on goods and services annually, could make highly accurate purchasing decisions regarding emissions, not price alone. The financial sector could accurately see the climate risks associated with their portfolios. As the system evolves in complexity, it could even help governments innovatively implement robustly informed carbon taxation policies.

The uses are manifold.



As the mechanism scales up across multiple sectors over the coming years, its success will grow through collaboration.

Harnessing AI together with the wealth of research and environmental data that already exists is only the beginning. As the mechanism evolves in accuracy and complexity over time, the participation of many actors and stakeholders from around the globe will be key in generating new data and in furthering knowledge and innovation. From citizen science to robust scientific review, from start-ups to multinationals, from governing bodies to governments, all will have a part to play.

