

## WHAT IS GPW?

Global Plastic Watch (GPW) is a digital platform that maps the world's plastic pollution in near real-time using a unique combination of satellite imagery and artificial intelligence.

**EXPLORE  
MAP** →

## HOW GPW WORKS?

⌵ FULLSCREEN



00:00



<https://globalplasticwatch.org/>

# Today's news

## One of India's trash mountains is on fire again and residents are choking on its toxic fumes



By Rhea Mogul, CNN

Updated 12:36 AM EST, Tue March 7, 2023

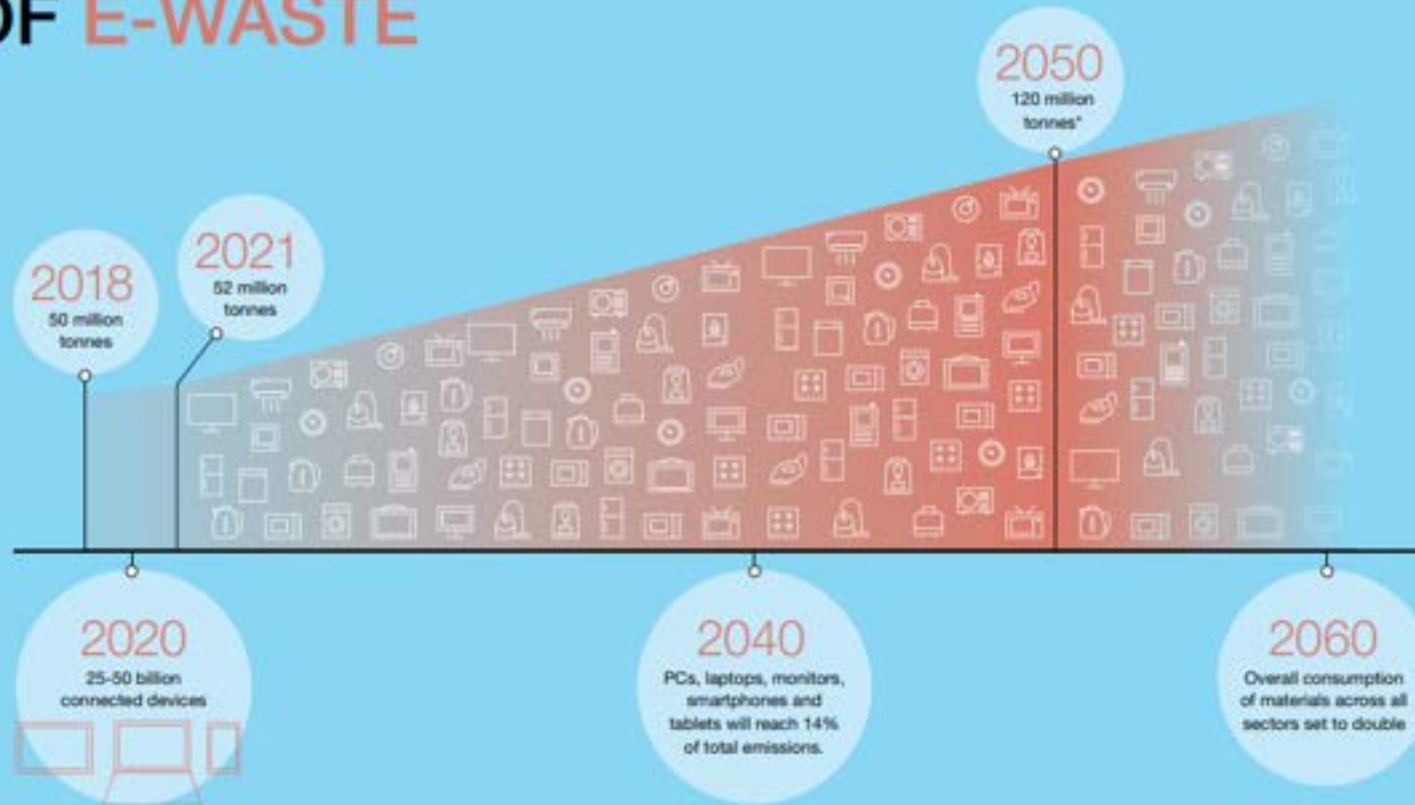
“India creates more methane from landfill sites than any other country, according to GHGSat, which monitors emissions via satellites. Methane is the second most abundant greenhouse gas after carbon dioxide – but it is a more potent contributor to the climate crisis because it traps more heat.”

“...it hasn't joined the 150 countries that have signed up to the Global Methane Pledge, a pact to collectively cut global emissions by at least 30% from 2020 levels by 2030. Scientists estimate the reduction could cut global temperature rise by 0.2% – and help the world reach its target of keeping global warming under 1.5 degrees Celsius.

India says it won't join because most of its methane emissions come from farming – some 74% from farm animals and paddy fields versus less than 15% from landfill.”

# THE FUTURE OF E-WASTE

Global generation of e-waste is estimated to **rise by 100%** compared to 2014 and amount to 74 megatons by 2030 (Digital Reset, 2022)



“a tsunami of e-waste”

“ E-waste can be **toxic**, is not biodegradable and accumulates in the environment, in the soil, air, water and living things. It can also have an adverse **impact on health**. **Children and women** are particularly vulnerable to the health risks of e-waste exposure.”

“a product can be made up of more than 1,000 different substances.”

“There is 100 times more gold in a tonne of mobile phones than in a tonne of gold ore.”

Report: The Platform for Accelerating the Circular Economy (PACE). (2019). *A New Circular Vision for Electronics Time for a Global Reboot*. World Economic Forum  
Source: Global E-waste Monitor, 2017

Digitalization for Sustainability (D4S), 2022: *Digital Reset. Redirecting Technologies for the Deep Sustainability Transformation*. Berlin: TU Berlin:

“the **environmental footprint** of digital devices and new **digital consumption** is substantial”

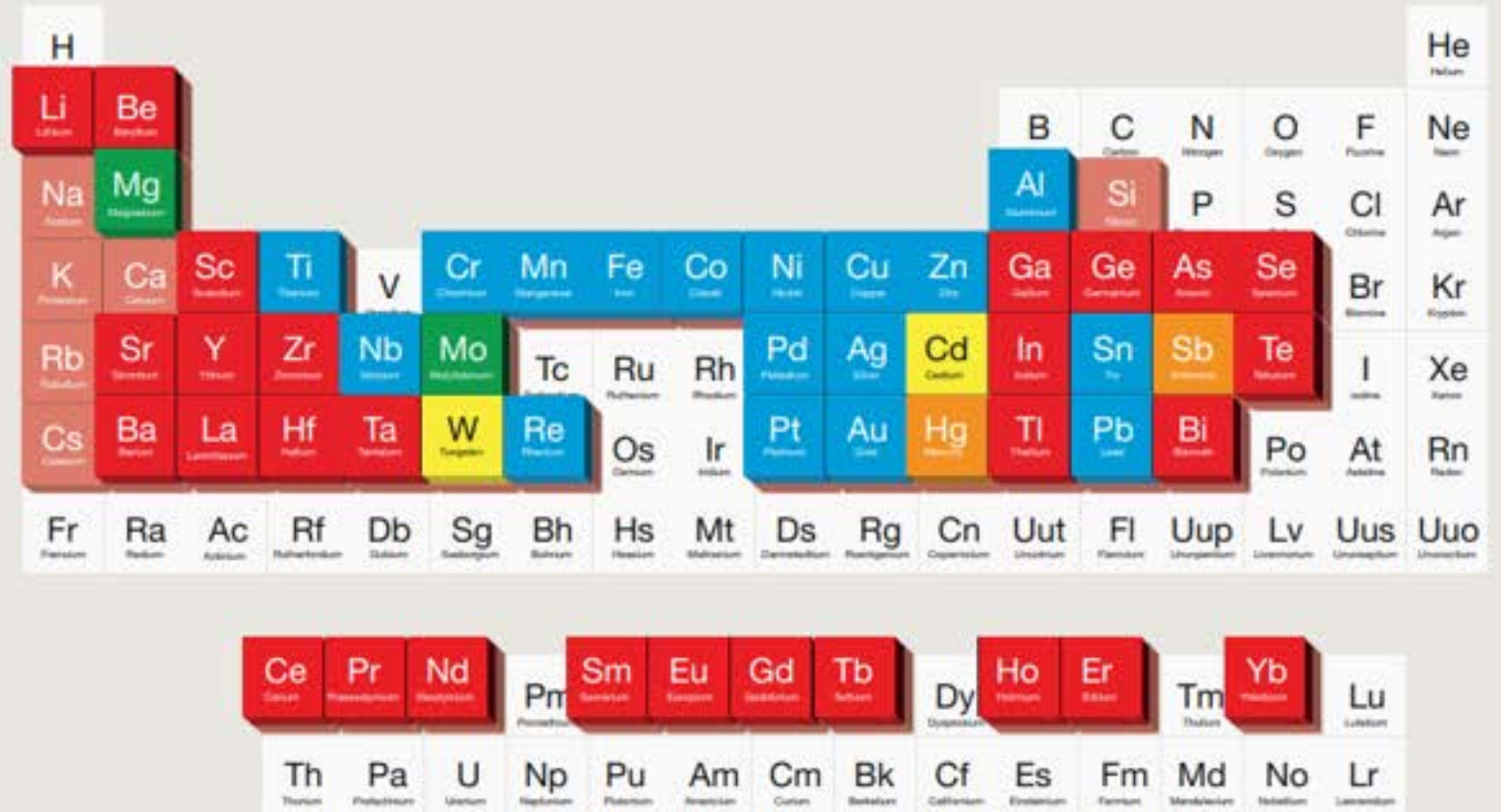
“digitalization is a double-edged sword regarding **social and environmental** sustainability.”

“To make digital technologies work for a deep sustainability transformation requires strong, coherent and **cross-sectoral** policymaking on all levels of governance.”

“digital technologies initiate **higher efficiency**, and digital services **substitute physical goods**. **But** on the other side, the **growth in the number of digital devices** and services **spurs energy and resource consumption**, and their application leads via various rebound effects to additional consumption in other sectors.”



Recycling rates

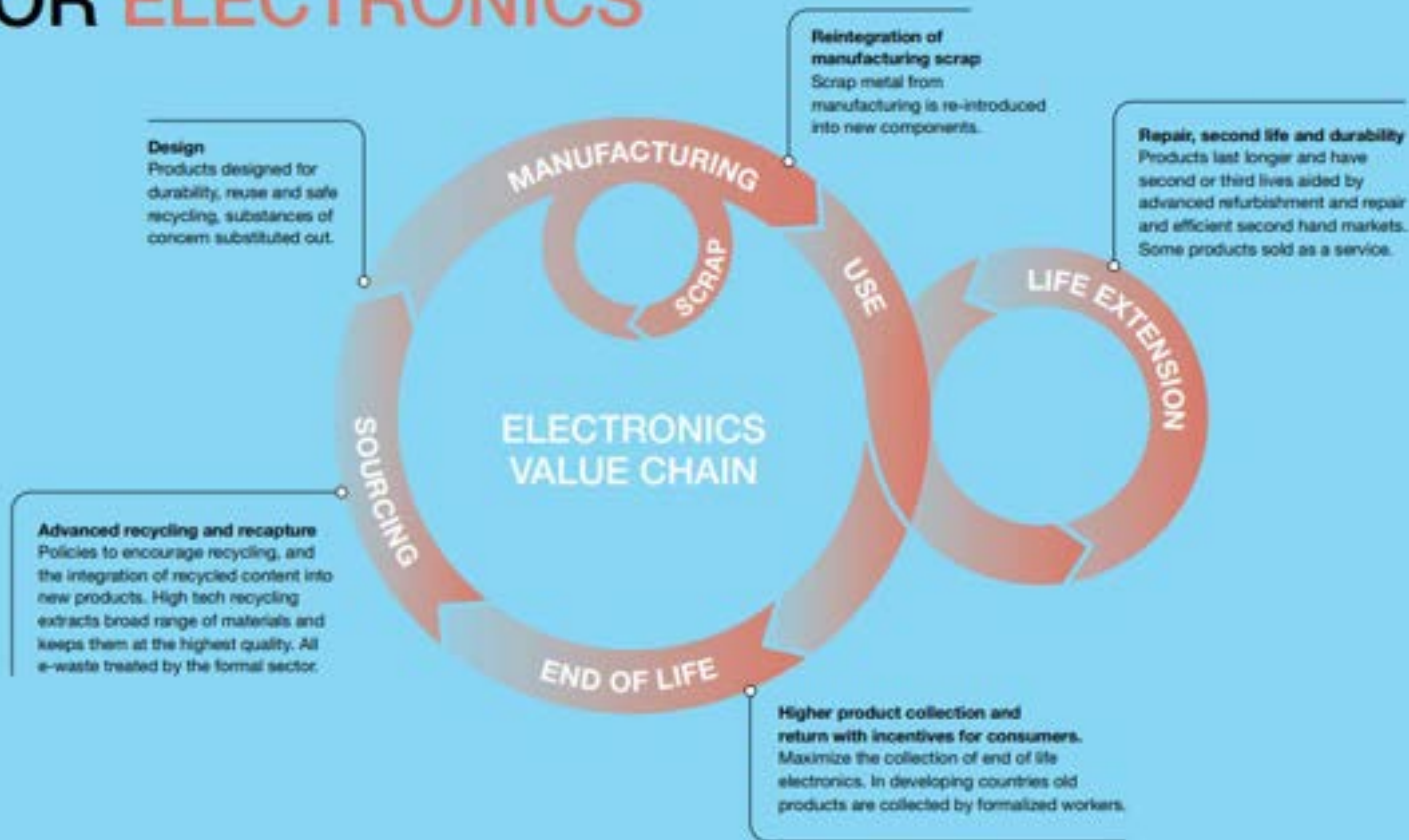


“e-waste contains many high-value and scarce materials, such as gold, platinum, cobalt, rare earths, and high quantities of aluminium and tin”

“Recycling rates globally are low. Even in the EU, which leads the world in e-waste recycling, just 35% of e-waste is officially reported as properly collected and recycled.<sup>42</sup> Globally, the average is 20%; the remaining 80% is undocumented, with much ending up buried under the ground for centuries as landfill.”

Report: The Platform for Accelerating the Circular Economy (PACE). (2019). *A New Circular Vision for Electronics Time for a Global Reboot*. World Economic Forum

# A NEW CIRCULAR VISION FOR ELECTRONICS



“The transition to a circular economy must take place in a way that benefits all stakeholders from the consumer to workers, government, businesses, entrepreneurs and society at large. There will be a need for mass collaboration, system changing ideas, new policy frameworks and new ways of doing business”

“The extraction and use of primary (raw) materials is much more polluting than secondary (recycled) materials.”  
OECD, Global Material Resources Outlook to 2060, (2018)

Report: The Platform for Accelerating the Circular Economy (PACE). (2019). *A New Circular Vision for Electronics Time for a Global Reboot*. World Economic Forum

# Digital product passport

“A major political instrument currently being developed is the digital product passport. This legislation will be introduced as part of the European Commission’s Circular Economy Action Plan and will **require companies to create passports** for certain **products**. The digital product passport summarises information about the **components, materials and chemical substances**, but also about **repairability, spare parts or professional disposal** of a product.” page 54

Digitalization for Sustainability (D4S), 2022: *Digital Reset. Redirecting Technologies for the Deep Sustainability Transformation*. Berlin: TU Berlin.

**At the heart of regenerative design is creative problem-solving rather than profit maximisation.**

“A deep sustainability transformation requires fundamental changes in digital governance and the organisation of economic sectors”

Digitalization for Sustainability (D4S), 2022: *Digital Reset. Redirecting Technologies for the Deep Sustainability Transformation*. Berlin: TU Berlin.



# We Have Breached the Planetary Boundary for Plastics and Other Chemical Pollutants





- *Craugastor myllomyllon* - A Guatemalan frog
- Spined dwarf mantis - Italy
- *Scleria chevalieri* - Senegalese plant
- Hawai'i yellowwood
- Cuban palm tree - *Roystonea stellate*
- Jalpa false brook salamander - Guatemala
- *Faramea chiapensis* - Mexican plant
- *Euchorium cubense* - Cuban plant
- *Banara wilsonii* - Cuban plant
- *Aloe sillicicola* - Madagascar plant
- *Chitala lopis* - A large fish Java
- *Eriocaulon jordanii* - grass Sierra Leone
- *Amomum sumatranum* - cardamom Sumatra
- Lost shark (*Carcharhinus obsoletus*)
- *Cora timucua* - lichen Florida
- *Dama gazelle* (*Nanger dama*) - Tunisia
- *Agave lurida* – succulent, Mexico
- Falso Maguey Grande - succulent Mexico
- *Eriocaulon inundatum* - Senegal
- *Persoonia laxa* - shrub Australia
- Nazareno (*Monteverdia lineata*) – plant, Cuba
- Wynberg conebrush – plant, South Africa
- Wolseley conebrush – plant, South Africa
- *Schizothorax saltans* - fish Kazakhstan
- *Alphonsea hortensis*, Sri Lankan tree species
- Lord Howe long-eared bat (*Nyctophilus howensis*)
- *Deppea splendens* - plant, Mexico
- Pass stubfoot toad (*Atelopus senex*) - Costa Rica
- *Pseudoyersinia brevipennis* - praying mantis, France

- 32 orchid species in Bangladesh
- 9 orchid species from Madagascar
- Smooth handfish, Tasmania
- 65 North American plants
- 22 frog species - Central and South America
- Chiriqui harlequin frog - Costa Rica
- Poison frog (*Oophaga speciosa*) - Panama
- Simeulue Hill mynas - bird
- 15 percent of mite species of the world's 1,25 million mite species.

- *Barbodes disa* - freshwater fish, Philippines
- *Barbodes truncatulus* - freshwater fish, Philippines
- *Barbodes pachycheilus* - freshwater fish, Philippines
- *Barbodes palaemophagus* - freshwater fish, Philippines
- *Barbodes amarus* - freshwater fish, Philippines
- *Barbodes manalak* - freshwater fish, Philippines
- *Barbodes clemensi* - freshwater fish, Philippines
- *Barbodes flavifuscus* - freshwater fish, Philippines
- *Barbodes katolo* - freshwater fish, Philippines
- *Barbodes palata* - freshwater fish, Philippines
- *Barbodes baoulan* - freshwater fish, Philippines
- *Barbodes herrei* - freshwater fish, Philippines
- *Barbodes lanaoensis* - freshwater fish, Philippines
- *Barbodes resimus* - freshwater fish, Philippines
- *Barbodes tras* - freshwater fish, Philippines

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# What We've Lost: The Species Declared Extinct in 2020

Dozens of frogs, fish, orchids and other species—many unseen for decades—may no longer exist because of humanity's destructive effects on the planet

By John R. Platt on January 13, 2021

“A few months ago a group of scientists warned about the rise of **“extinction denial”** an effort much like climate denial to mischaracterize the extinction crisis and suggest that human activity isn't really having a damaging effect on ecosystems and the whole planet.”

UN Report: Nature's Dangerous Decline 'Unprecedented'; Species Extinction Rates 'Accelerating'



Current global response insufficient;  
'Transformative changes' needed to restore and protect nature;  
Opposition from vested interests can be overcome for public good  
Most comprehensive assessment of its kind;  
1,000,000 species threatened with extinction

Sea **turtles** have been around since dinosaurs roamed the earth, **more than 100 million years!** They're air-breathing reptiles who inhabit tropical and subtropical ocean waters throughout the world.

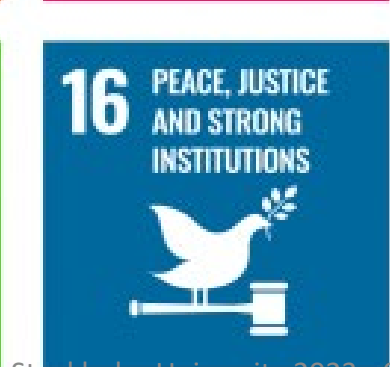
**Ecocentrism:**  
valuing nature for its own sake

**Anthropocentrism:**  
valuing nature because of material or physical benefits it can provide for humans.





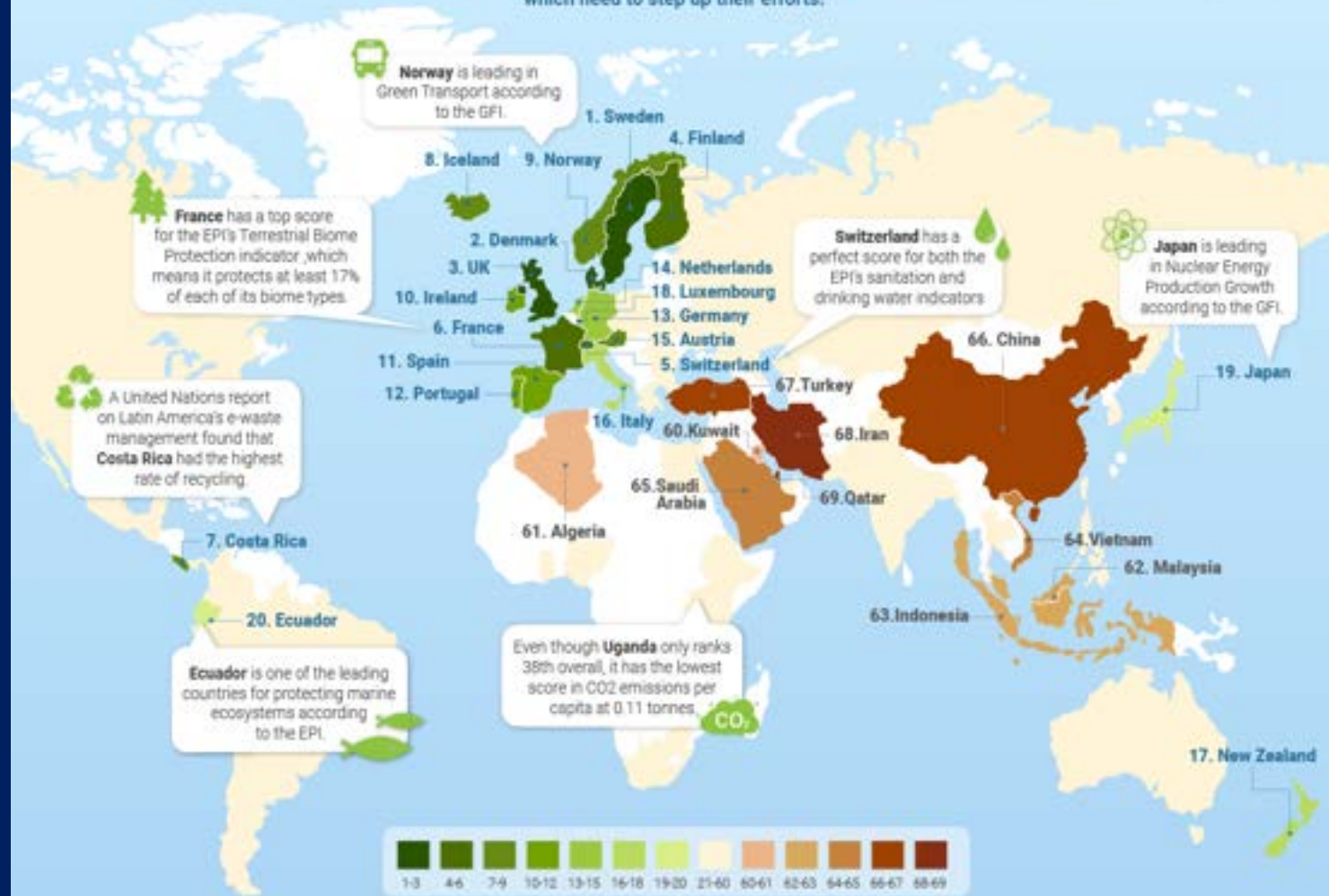
# SUSTAINABLE DEVELOPMENT GOALS



# Invasion and extinction

# The Most and Least **Green Countries** in the World

Being "green" is a reflection of how much a country cares about the natural environment as well as the health of its citizens. By comparing data from multiple sources, we ranked a total of **69 countries** in order of how green they are. You can see which countries came out on top and which need to step up their efforts.



## Top Green Countries in More Detail