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ERASMUS+ YOUTH EXCHANGE

Nurturing Earth and Wellbeing

Community, mental health, and environment!

Project number: 2023-3-LV02-KA152-YOU-000182668

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Latvia
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EMOTiC

Croatia
IMPRESS

Greece
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Romania
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Czechia
EYCB

Poland
LevelUp

Community Gardens and Urban Green Spaces

List of contents

What is the urban green space?

- Urban green space is a component of “green infrastructure”.
- It is an important part of **public open spaces** and **common services provided by a city** and can serve as a health-promoting setting for all members of the urban community.

Types of urban green spaces


“
Urban green space is an important investment that local authorities can make on behalf of citizens and their well-being

Why is it important?

URBANISATION ISSUES

New suburban areas don't have **ADEQUATE SPORTING RESERVES**

No green plot ratios for high-rise mean these **BECOME HOTTER**

Tree cover is **DECLINING** across the metropolitan area
despite innovative LGAs developing Urban forest initiatives

REDUCTION IN HAPPINESS AND WELLBEING in our communities.

WATER SUPPLY
for public open space including sporting fields is facing reduced water allocations.

Water supply options will **COST MORE** into the future.

A DRYING CLIMATE in SW-WA reduces water resources.

Increasing incidence of **MENTAL HEALTH ISSUES**

PREMATURE AND UNNECESSARY DEATHS in community from urban heat island effects.

GREEN SPACE SOLUTIONS

DE-CENTRALISED WATER TREATMENT
offers a supply to some new suburban green sporting spaces.

Government in WA is moving to embed **MAJOR URBAN PLANNING INITIATIVES** across all departments.

IMPROVE HOSPITAL RECOVERY RATES by making hospitals green.

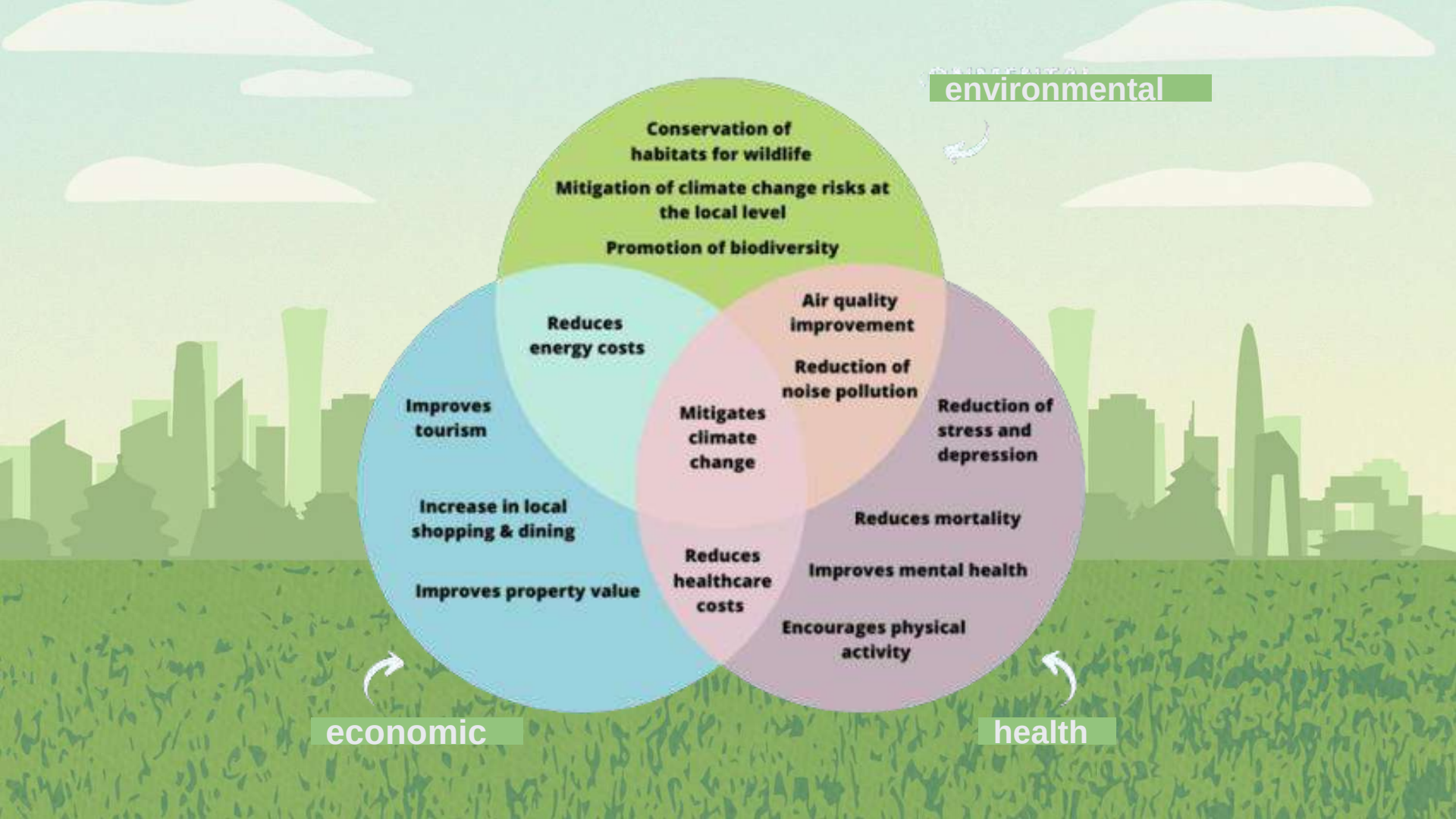
Government to develop Green Spaces **STRATEGY PLAN**

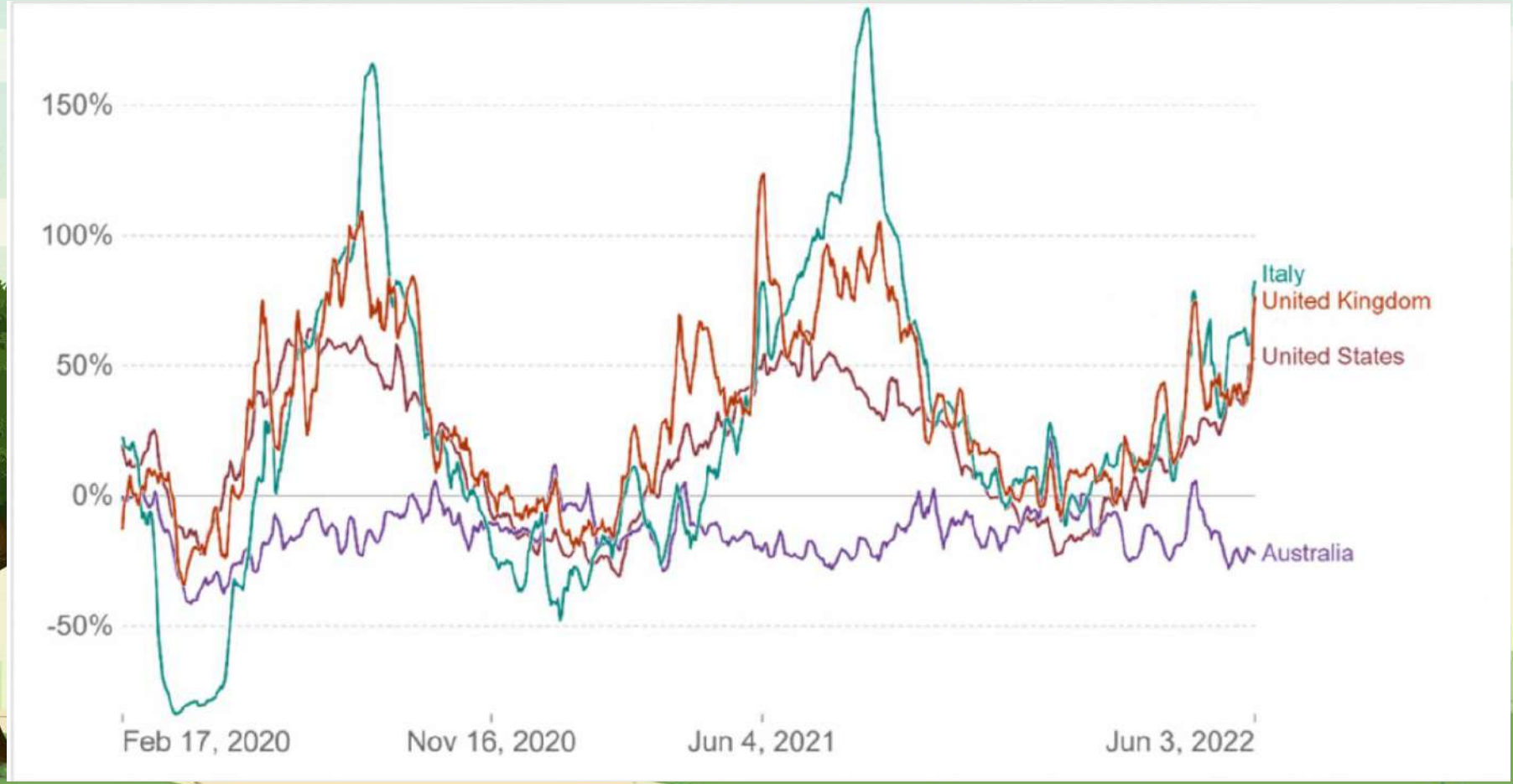
Western Australia has nearly **13,000 SPECIES OF PLANTS**
There is a WA native plant species for every niche in the landscape.

Perth is renowned for **CLEAN AIR AND WATER** and **RIVERSIDE BEAUTY**

Benefits

Health & Wellbeing	Temperature & Climate Change	Air Quality
Flooding & Water Quality	Wildlife & Habitats	Economic Impacts


environmental
Conservation of habitats for wildlife
Mitigation of climate change risks at the local level
Promotion of biodiversity
Reduces energy costs
Air quality improvement
Reduction of noise pollution
Improves tourism
Mitigates climate change
Reduction of stress and depression
Increase in local shopping & dining
Reduces mortality
Reduces healthcare costs
Improves mental health
Improves property value
Encourages physical activity
economic
health



Change in the number of visitors to park and outdoor spaces (Feb 2020 to Jun 2022) relatively to before the pandemic in Italy, UK, US, Australia. Source: Google COVID-19 Community Mobility Trends

Challenges & Solutions in Urban Green Space Planning

Limited Space	Air and Noise Pollution	Biodiversity Loss
Implement **vertical greening**, such as **green walls and rooftop gardens**, to maximize space utilization.	Implement air quality improvement measures and **noise reduction strategies** with urban greening initiatives	Preserve **existing green habitats**, and create **wildlife corridors**. Educate the community on the importance of biodiversity.

Challenges & Solutions in Urban Green Space Planning

Conflict between users and competition for space	Community dissatisfaction	Uncertain or reduced budgets
Mixing determined use of urban green space with **specific equipment features** for certain activities, with **spaces that are less structured and allow all kinds of activities**	Early **community engagement** and Clarifying at an early stage that urban green space interventions **need time to deliver their full benefits**	Ensuring local political support early on & Working with **community groups, non-governmental** and other organizations to support maintenance


“Contact with nature is an essential component of healthy cities

How to design urban green spaces?

- Put the **green space** close to people
- Plan for **a diversity** of urban green space types, responding to **diverse demands.**
- Consider **simple design features** to improve the comfort of urban green space use
- Think of the **maintenance needs** of the urban green space.

Vienna is situated on the western edge of the Vienna Basin, on the gentle slopes of the Vienna Woods, a branch of the foothills of the Alps. This “Green Lung” is part of the (legally protected) green belt.

Stadtpark is the richest park in Vienna in terms of monuments and sculptures.

The Ohmann glass house was completely renovated in 1998. Since then, the butterfly house with tropical plants and over 50 species of butterflies has been located in the left wing; the middle part is used as a café-restaurant.

Singapore already has over **400 parks** and f**our nature reserves**– and by 2026 this will increase to 300 hectares, with 200 hectares of skyrise greenery by 2030.

In South Korea, Seoul has planted a forest in a bid to lower city temperatures by 3 to 7°C.

Activity

ICE- BREAKER GAME

DO YOU WANT TO PLAY DOCTOR WITH ME?

Key objective of this game is to try to guess what we will be talking about.

1. Each patient is given a card with their symptoms and a brief backstory.
2. Doctors take turns asking each patient questions to diagnose their condition.
3. Patients can respond based on their symptom cards.
4. Doctors try to guess the correct diagnosis based on the symptoms and answers given by the patients.

Doctors: Four individuals playing the role of doctors.

Patients: Four individuals playing the role of patients.

But first let me take your history...

PATIENT 1

- Symptoms: Frequent panic attacks, nightmares, constant worry about future disasters, difficulty sleeping.
- Backstory: Lives in an area prone to hurricanes and has experienced several severe storms in recent years.

Anxiety due to Natural Disasters

PATIENT 2

- Symptoms: Persistent sadness, loss of interest in daily activities, fatigue, feelings of hopelessness.
- Backstory: Lives in a farming community affected by prolonged droughts, leading to crop failures and food shortages.

Depression from Drought and Food Insecurity

PATIENT 3

- Symptoms: Flashbacks of fire, severe anxiety, avoidance of places that remind of the fire, hypervigilance.
- Backstory: Survived a major wildfire that destroyed their home and community, now feels constantly on edge.

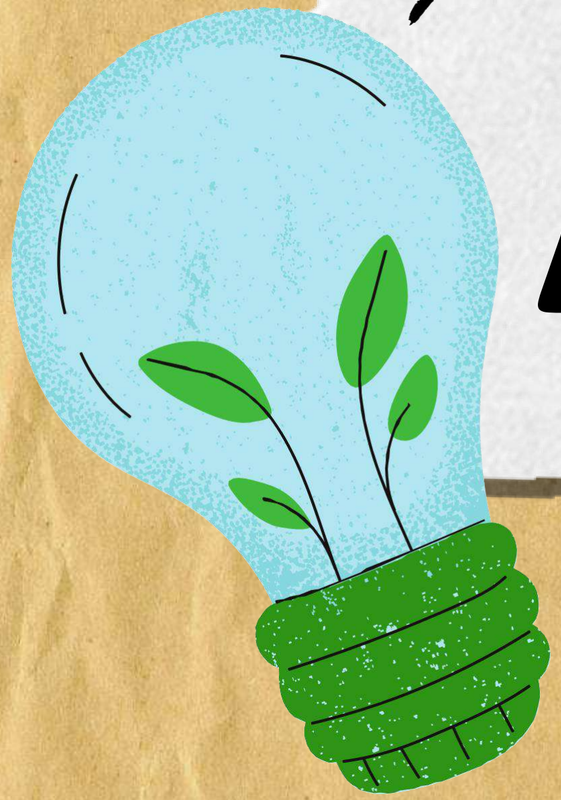
PTSD from Wildfires

PATIENT 4

- Symptoms: Irritability, difficulty concentrating, headaches, insomnia.
- Backstory: Lives in an urban area experiencing frequent heatwaves, which makes living conditions unbearable and impacts daily life.

Heat-Related Stress

WELLBEING AND CLIMATE ANXIETY



Presented by TEAM CROATIA

Introduction

Overview of Climate Anxiety

- Definition: A chronic fear of environmental doom.
- Prevalence: Increasing among all age groups, particularly youth.
- Impacts: Stress, anxiety, depression, and feelings of helplessness.

Connection to Wellbeing

- Mental health is significantly impacted by external environmental factors.
- Importance of diet and lifestyle in managing climate anxiety.

POOR DIET = STRESS AND DEPRESSION

- Nutritional Deficiencies: Poor diet can lead to deficiencies in essential nutrients.
- Impact on Mood: Diets high in processed foods and sugars are linked to higher rates of depression and anxiety.

WHAT IF I TOLD YOU WERE AN ADDICT?

-suggar and flour can have addictive nature

- **Biochemical effects**

  Foods high in sugar and refined flour trigger dopamine release, similar to addictive substances.

- **Mental health impact**

  an lead to addiction, mood swings, and chronic stress.

Food addiction and how to cope with everything

- foods high in sugar and flour can trigger addictive behaviors

- Coping mechanisms:
  1. Mindful eating practices.
  2. Seeking professional help if needed
  3. Education on healthy eating habits
  4. Importance of understanding and addressing food addiction for better mental health

What should we eat?

Planetary diet

- EAT-Lancet Commission - promote human health and environmental sustainability
- whole grains, fruits, vegetables, nuts, and legumes.
- reduces red meat and sugar intake.
- benefits: lower greenhouse gas emissions, improved cardiovascular health, and reduced riskof chronic

Vegetarianism

- environmental benefits;
- lower carbon footprint compared to meat-based diets
- reduced deforestation and habitat destruction
- mental helath benefits
- higher intake of fruits and vegetables linked to better mood and lower risk of depression

What should we eat?

Mediterranean diet

- High in fruits, vegetables, whole grains, olive oil, and fish; low in red meat and sugar.
- environmental impact:
- sustainable fishing practices.
- reduced carbon footprint compared to Western diets.

- Mental Health Benefits:
- rich in omega-3 fatty acids, which support brain health.
- associated with lower rates of depression and anxiety.

WHAT ABOUT THE LEFTOVERS?

- approximately one-third of all food produced is wasted.
- **Environmental Impact:**
  - wasted food contributes to methane emissions from landfills.
  - loss of resources such as water, labor, and energy used in food production
- **Solutions:**
  - better food planning and storage.
  - policies to reduce food waste at all stages of the supply chain.

Oh, I wanna talk to somebody

How can educational programs in schools and communities help reduce climate anxiety among younger generations?

How can people balance the immediate financial costs of healthy eating with the long- term benefits for their mental health and the environment?

Project presentation

Permaculture principles and practices

Czech team

What is Permaculture?

- Definition: Permaculture is a system of agricultural and social design principles that simulate or directly utilize the patterns and features observed in natural ecosystems.
- Goal: Achieve a sustainable lifestyle that minimizes ecological impact.

Three Ethical Pillars of Permaculture

- Care for the Earth: Protect and regenerate natural resources.
- Care for People: Meet basic human needs and improve quality of life.
- Fair Share: Equitable distribution of resources and surplus.

Twelve Permaculture Principles

- 1. Observe and interact
- 2. Catch and store energy
- 3. Obtain a yield
- 4. Apply self-regulation and accept feedback
- 5. Use and value renewable resources and services
- 6. Produce no waste
- 7. Design from patterns to details
- 8. Integrate rather than segregate
- 9. Use small and slow solutions
- 10. Use and value diversity
- 11. Use edges and value the marginal
- 12. Creatively use and respond to change

Permaculture Practices

- Forest Gardening: Mimicking natural forest structure to produce food.
- Polyculture: Planting different crops that benefit each other.
- Composting: Recycling organic waste into soil nutrients.
- Rainwater Harvesting: Efficient use of rainfall.

Examples of Permaculture Projects

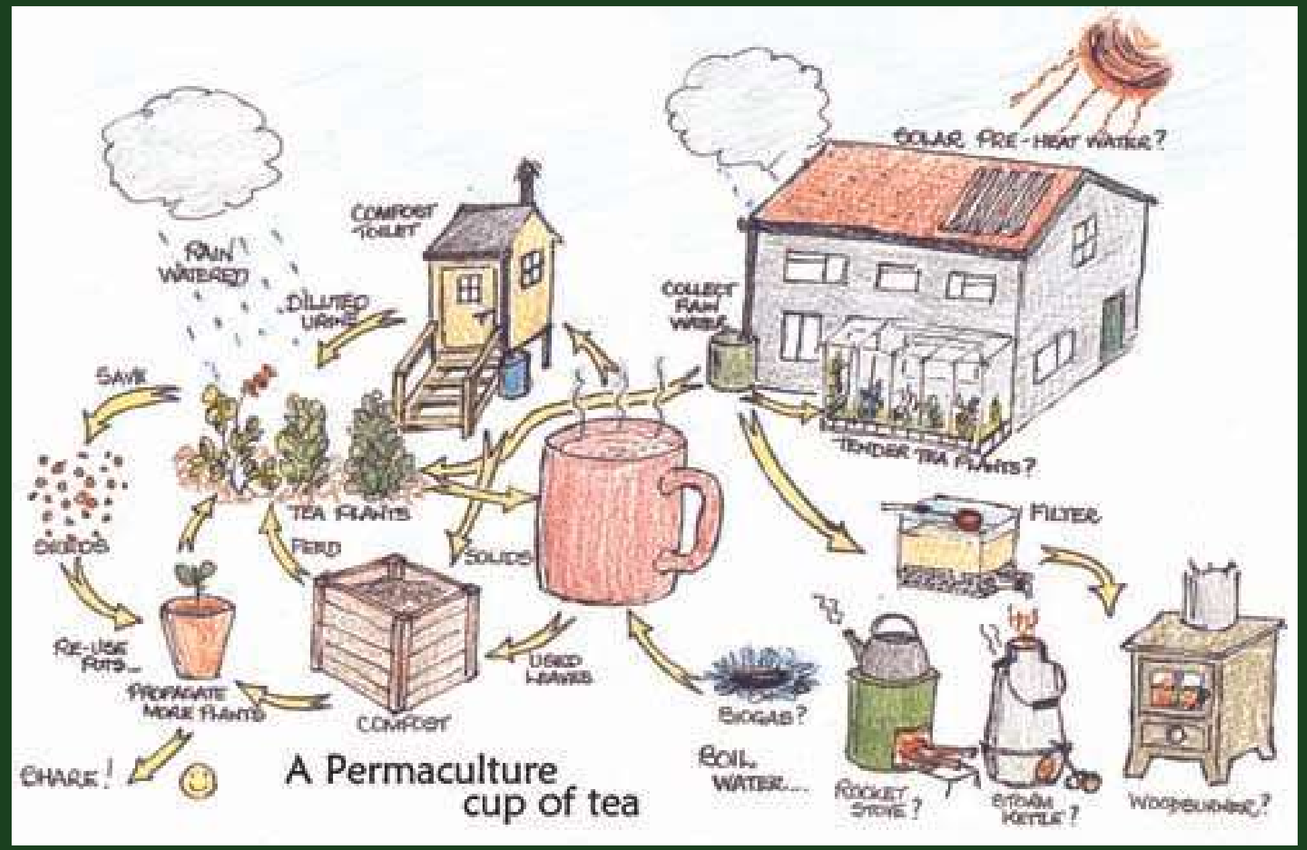
- Permaculture Farms: Community farms using permaculture principles.
- Urban Permaculture Gardens: Integrating green spaces in urban areas.
- Eco-villages: Communities living in harmony with nature.

Benefits and challanges of Permaculture

- Environmental: Reduces ecological footprint, protects biodiversity.
- Economic: Reduces costs for energy and resources.
- Social: Supports communities and improves quality of life.

- Initial Investment: Time and resources needed for implementation.
- Knowledge and Education: Need for deep understanding of ecosystems and design.
- Cultural Barriers: Acceptance of new practices in society.

Visual illustration

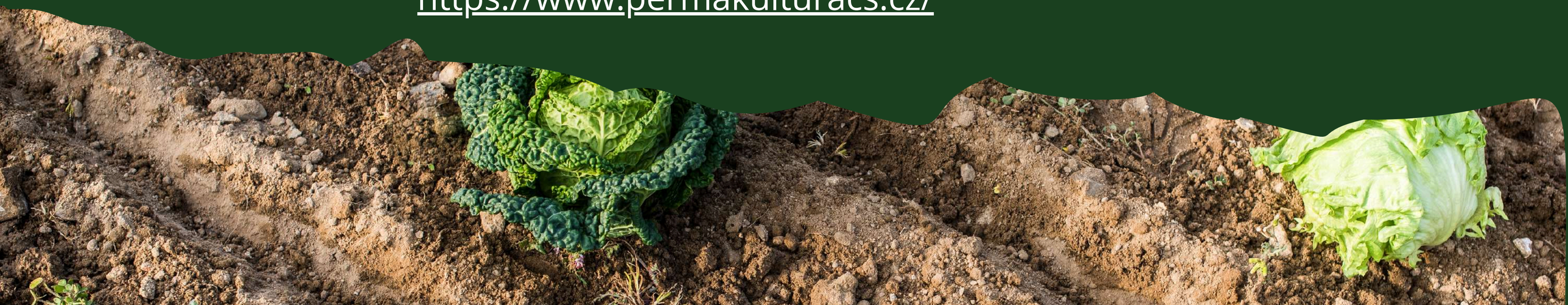


Conclusions

- Summary: Permaculture is a comprehensive and sustainable approach to life and agriculture.

- Call to Action: Get involved in permaculture projects and support sustainable practices.

https://www.permakulturacs.cz/



Nurturing earth and wellbeing

Thank you for your attention


Human’s relationship with
nature and Wellbeing

History

- **Prehistoric Era: Hunters.** People lived in direct contact with nature. Dependent on it. Their knowledge of the environment was impressive, as they knew how to locate prey and collect edible plants.
- **Ancient Civilizations:** Rural and Urban Life. Ancient Greece and Rome, people lived in both urban centers and rural areas. Contact with nature was vital for agricultural production, while at the same time the exploitation of natural resources was developed.
- **Industrial Revolution:** Urbanization and Industrialization: The industrial revolution of the 18th and 19th centuries caused massive urbanization and increased the exploitation of natural resources. People moved away from nature as city life dominated.

Today

- **Urbanization and Technology:** The majority of the world's population lives in urban areas. Daily contact with nature is limited, and technology has changed the way we perceive and interact with the environment.
- **Environmental Sensitivity:** Although direct contact with nature is reduced, environmental sensitivity has increased. People recognize the negative effects of human activity and efforts are made for sustainable development and environmental protection.
- **Climate Change and Ecological Challenges:** The impacts of climate change, such as extreme weather and biodiversity loss, make it imperative to strengthen our relationship with nature and adopt practices that will protect the environment.
- **Reconnecting with Nature:** There is a growing movement to reconnect people with nature, through the creation of green spaces in cities, the promotion of sustainable agriculture, and support for activities that promote contact with nature, such as hiking and gardening.

Introduction

- 1)Access to Nature
- -Green Spaces: Develop and maintain parks, gardens, and nature reserves in urban areas to provide accessible natural spaces for people.
- -Outdoor Activities: Encourage outdoor activities like hiking, camping and gardening to help people experience and appreciate nature.

- 2)Sustainable Living
- -Reduce, Reuse, Recycle: Encourage the three Rs to minimize waste and reduce the ecological footprint.
- -Sustainable Consumption: Advocate for the consumption of sustainable products, support local and organic farming and promote plant-based diets.
- -Green Technologies: Promote the use of renewable energy sources and green building practices.

- 3)Education and Awareness
- -Environmental Education: Integrate environmental studies into school to teach children about ecology and sustainable practices from an early age.
- -Public Awareness Campaigns: Use media, workshops, and community events to inform the public about environmental issues and the importance of nature conservation.
- -Erasmus+ projects: Participate in Erasmus+ projects related to sustainability in order to get informed about sustainable practices and sustainable ways of living in an non-formal way.

- 4) Personal Reflection and Responsibility
- -Mindful Consumption: Reflect on personal consumption patterns and make conscious choices that reduce environmental impact.
- -Connecting with Nature: Spend time in nature, observe it's beauty and develop a personal relationship with the natural world.
- -Mindfulness and Spiritual Practices: Adopt practices like meditation and nature retreats to deepen the spiritual connection with nature.

Benefits

- Physical health: Improving the immune system, lowering blood pressure
- Mental health: Reduce anxiety and depression, increase mood
- Social well-being: Strengthening social ties and community

Studies and Statistics

Studies and Statistics

Studies have shown that nature contributes to :

- Reduction of stress
  - A study conducted in the Netherlands found that spending time in nature can lead to a 20% reduction in the levels of cortisol, a stress hormone in the body
- Improved mental health
  - A systematic review of the evidence found that exposure to green spaces is associated with lower levels of depression and anxiety
- Enhanced cognitive Function
  - Research by the University of Michigan found that memory performance and attention span improved by 20% after people spent an hour interacting with nature .

Thanks for watching

- ***Active green solution***
- ***Facebook***

Carbon Neutrality: Goals and Realities

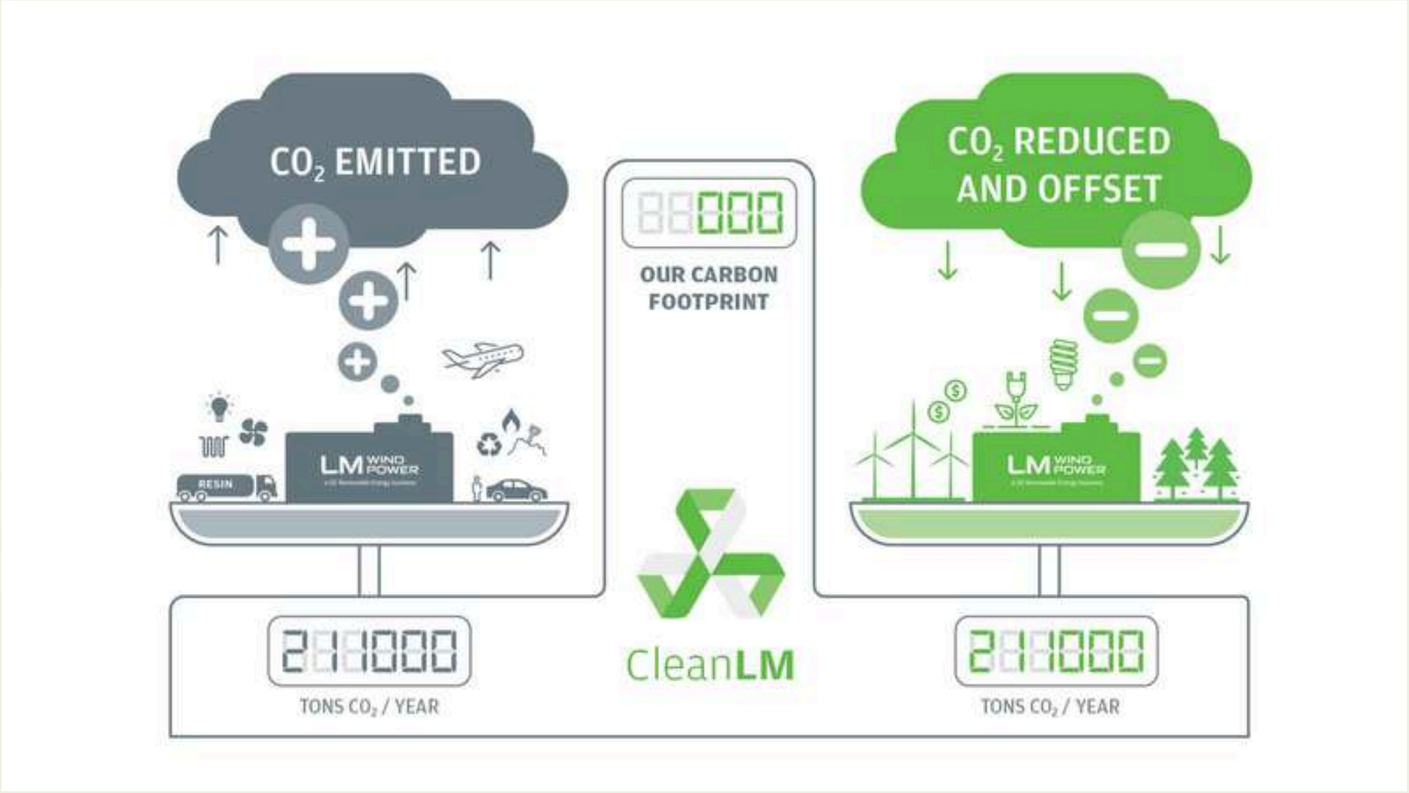
Hungarian team:
-Axel Uhalde
-Hichame Oujeddi
-Mohammad Alkasajy
-Nikolett Szentesi
-Sorour Ghasem Zadeh

SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

Definition of carbon neutrality:

Carbon neutral refers to achieving zero carbon emissions by balancing the amount of carbon released with the same amount absorbed or offset



The goal of carbon neutrality

1.Global context:
Paris Agreement aims to limit global warming well below 2°C

2.National context:
Many countries have pledged to achieve carbon neutrality by 2050

3.Corporate context:
Companies and groups like Wizzair and Formula1 aim for carbon neutrality in their operations

Key Strategies for Achieving Carbon Neutrality

Reducing emissions

Energy efficiency

Afforestation and reforestation

Carbon capture and storage (CCS)

Renewable energy sources

Investment in sustainablle projects

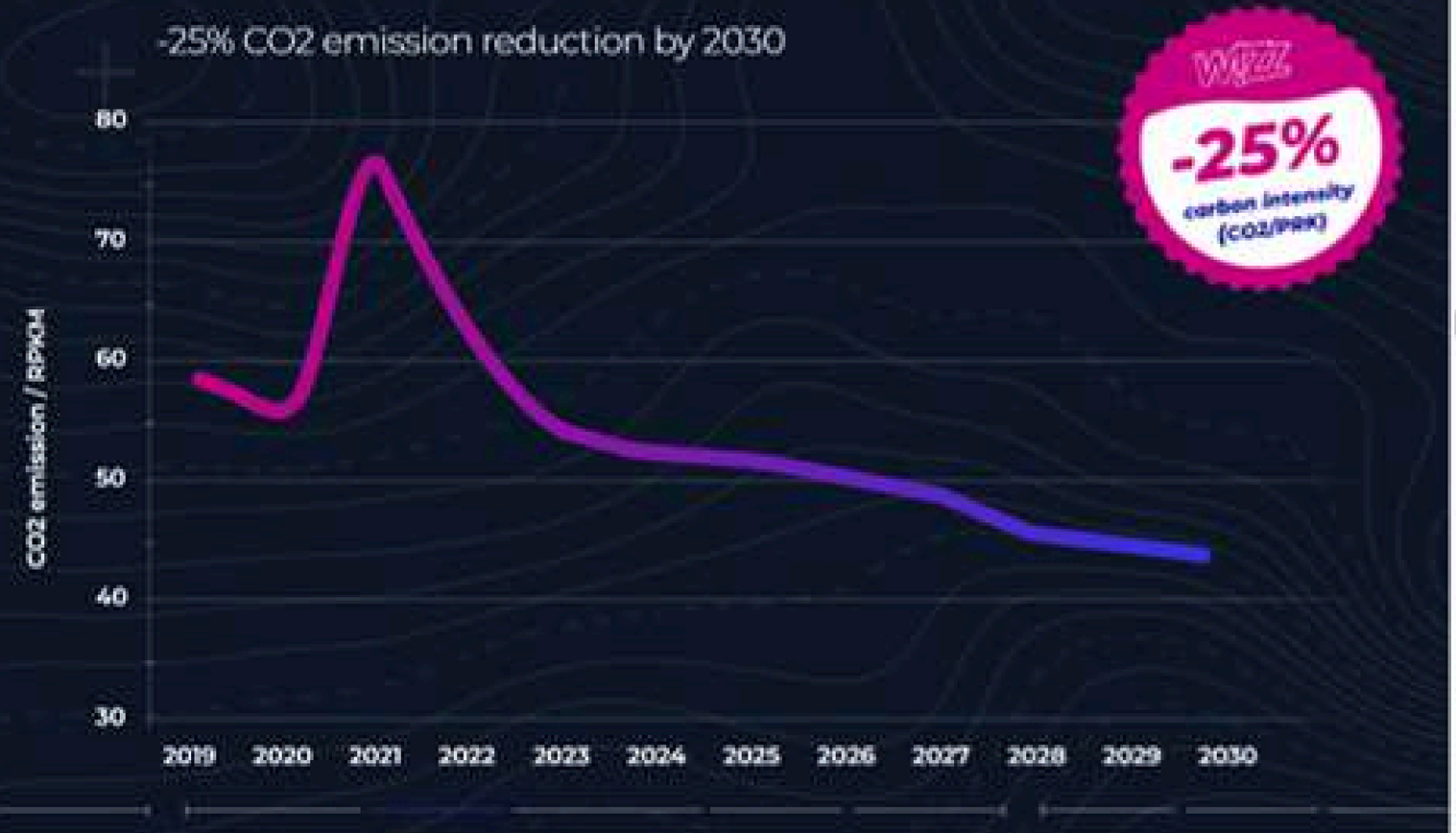

CAPA
Environmental Sustainability Airline of the Year 2023
GLOBAL
FLY THE GREENEST
wizzair.com

Commitment to further reduce our environmental impact

Wizz Air is strongly committed to reducing climate change impact globally and locally alike. We support the Paris Agreement aiming to limit temperature rise below 1.5C as well as the European Green Deal and the Destination 2050 guidelines aiming to reach net zero emissions by 2050.

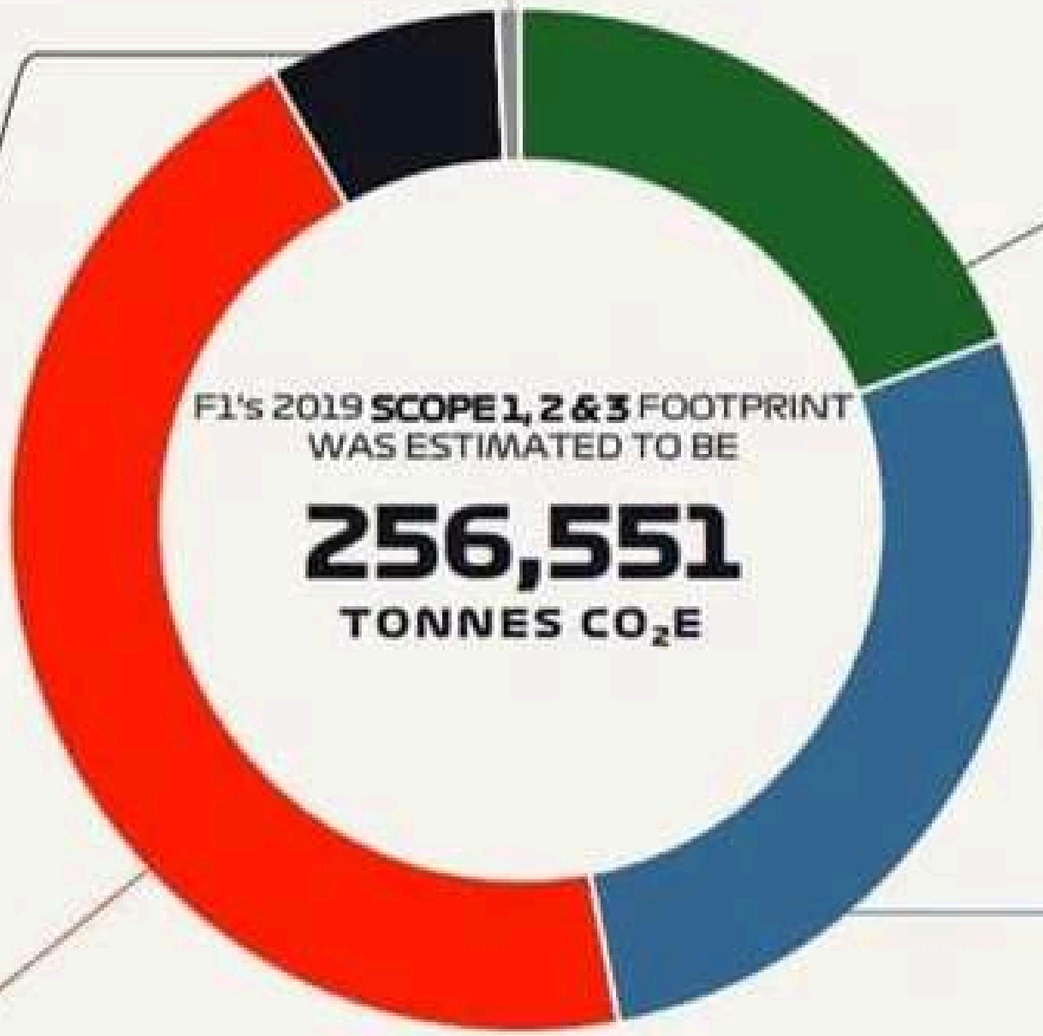
Wizz Air is proud to have one of the lowest CO2 emissions (G/RPK) in Europe. We commit to further reducing our CO2 emission by 25% until 2030 compared to 2019 levels and to further limiting other greenhouse gas emissions. The ambitious plan is driven by our latest technology fleet, fuel saving initiatives and usage of sustainable aviation fuel.

Alongside technology and operational improvements, alternative fuels are an essential part of decarbonising the




TM
NET ZERO
2030

The Race to Sustainability: Formula 1’s Carbon Footprint and Net Zero Pledge



POWER UNIT EMISSIONS

0.7%

POWER UNIT EMISSIONS

All emissions associated with the fuel usage of the power units across all 10 teams, at all 21 Grands Prix, and at pre-, mid- or post-season testing

EVENT OPERATIONS

7.3%

EVENT OPERATIONS

All event impacts including broadcasting, support races, Paddock Club operations, circuit energy use, generator use & teams at circuit impacts (excluding Power Unit emissions)

LOGISTICS

45.0%

LOGISTICS

All road, air or sea logistics across the sport including the movement of teams equipment, F1 equipment, Paddock Club equipment and race tyres

FACILITIES AND FACTORIES

19.3%

FACILITIES AND FACTORIES

All F1 owned or operated offices or facilities, as well as all teams owned and operated offices, factories or facilities

BUSINESS TRAVEL

27.7%

BUSINESS TRAVEL

All individuals air and ground transportation, as well as hotels impact for all F1 Teams employees and employees of major event partners

What is F1 Doing to Hit Its Net Zero Destination?

1. Use of sustainable fuels

2. Use of renewable energy

3. Other sustainability measures

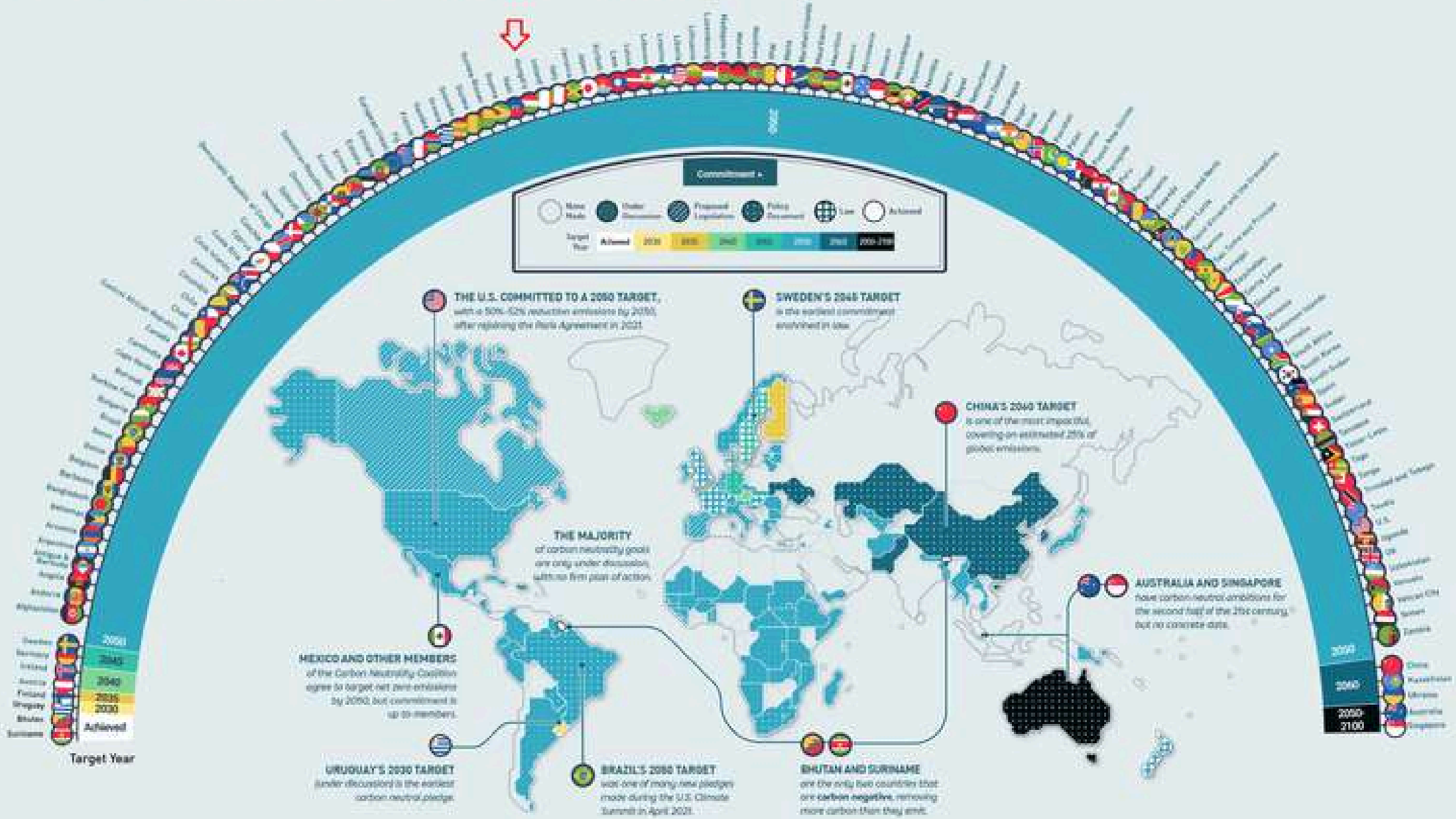
“As always, there is never one silver bullet to these challenges. There are a whole array of changes we have to make, from on the track to where we work.”

-- Ross Brawn, the company’s Managing Director of Motorsports

RACE TO NET ZERO

CARBON NEUTRAL GOALS BY COUNTRY

Which countries have made a carbon neutral pledge?
This map breaks down pledges by target year and level of commitment.



Presented by:

motivepower

NPUC

VISUAL CAPITALIST

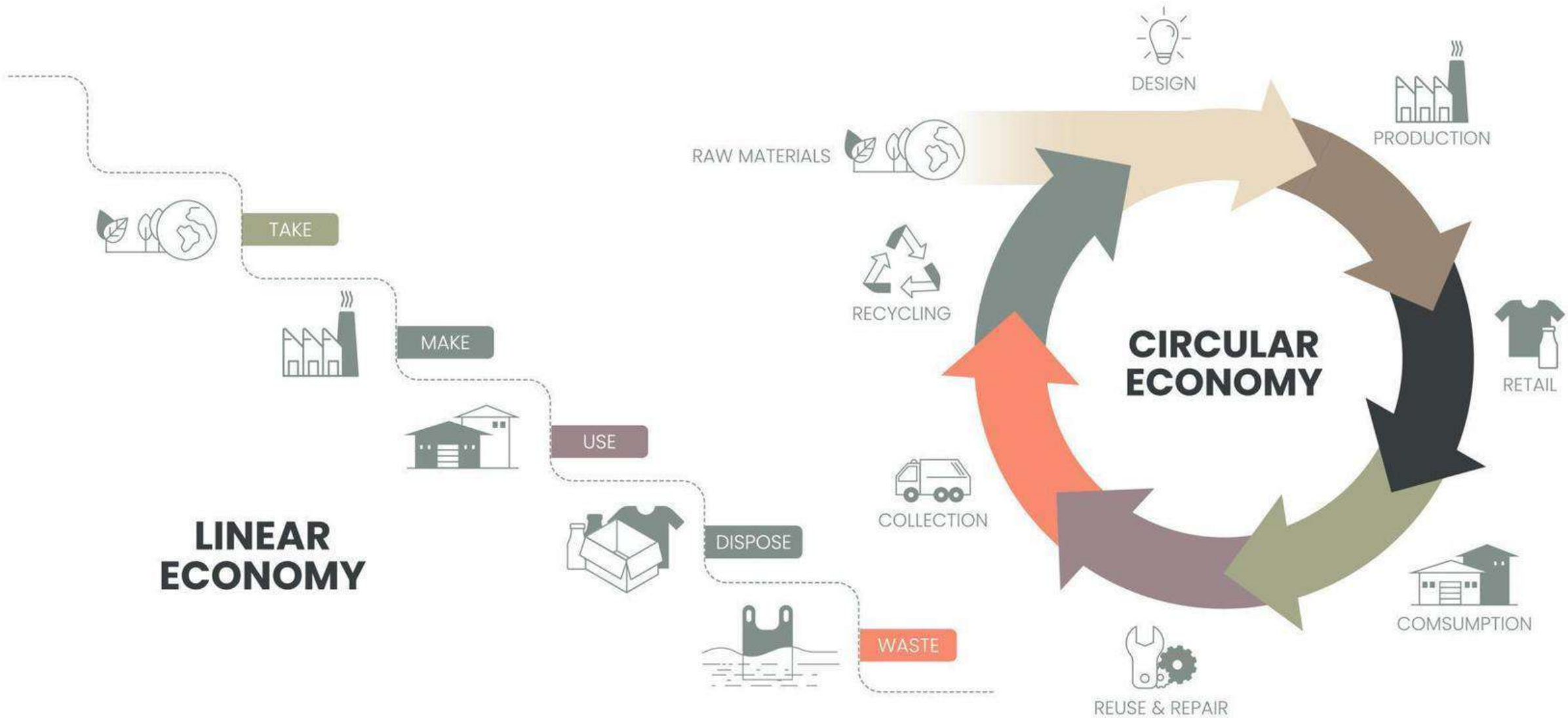
SOURCES: Energy and Climate Intelligence Unit, Carbon Neutrality Coalition, Climate Action Tracker

Zero-waste

LATVIA

THE DIFFERENCE BETWEEN

LINEAR AND CIRCULAR ECONOMY



Zero Waste:

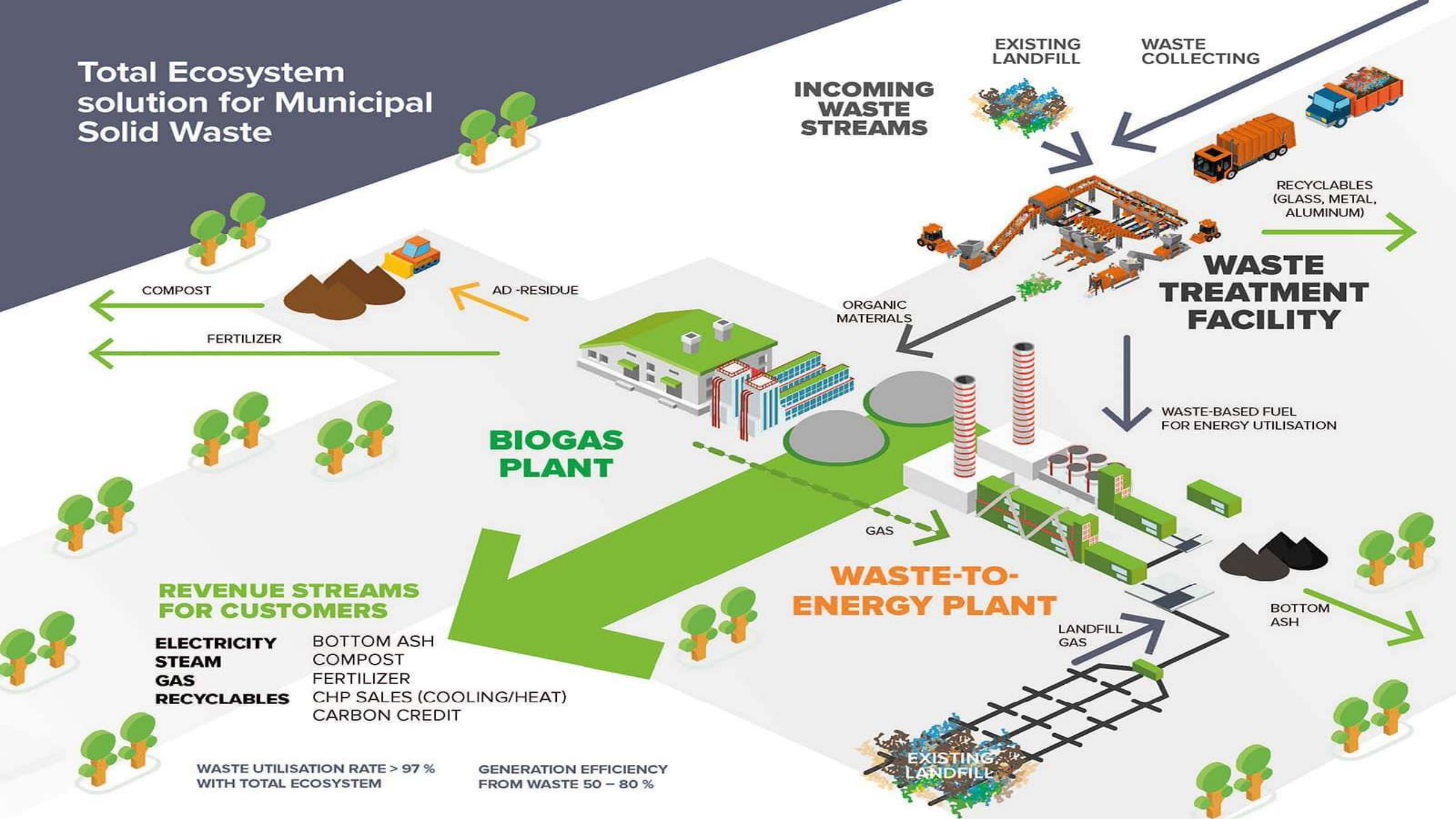
- The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.

- 90% diversion from landfills and incinerators.

- Only those residual waste fractions which are no longer available for material utilisation should be treated in WtE plants, especially if they are harmful or hazardous.

- For inert and mineral waste and hazardous concentrates from other waste treatment processes, specific landfills are needed as final sinks.

Total Ecosystem solution for Municipal Solid Waste



REVENUE STREAMS FOR CUSTOMERS

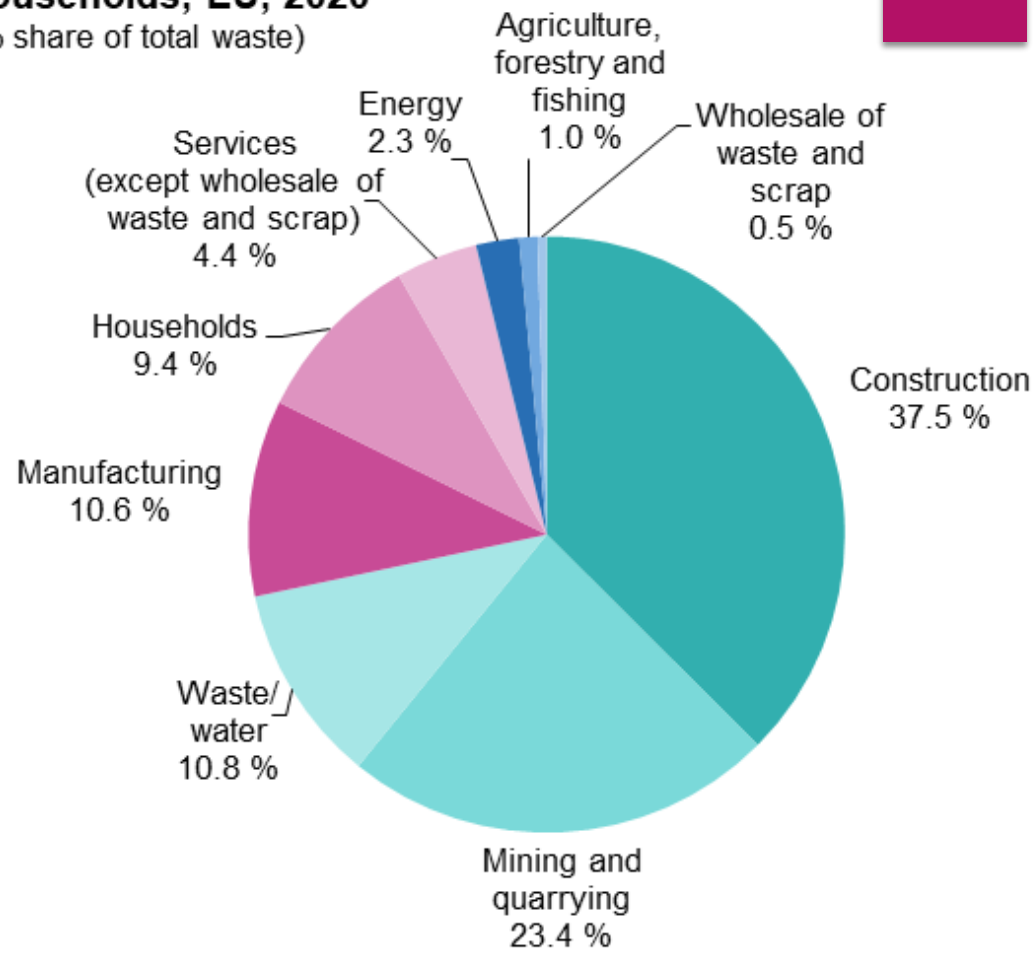
ELECTRICITY	BOTTOM ASH
STEAM	COMPOST
GAS	FERTILIZER
RECYCLABLES	CHP SALES (COOLING/HEAT)
	CARBON CREDIT

WASTE UTILISATION RATE > 97 %
WITH TOTAL ECOSYSTEM

GENERATION EFFICIENCY
FROM WASTE 50 – 80 %

- 776 million tonnes of waste excluding major mineral waste were generated in 2020, equivalent to 36 % of the total waste generated

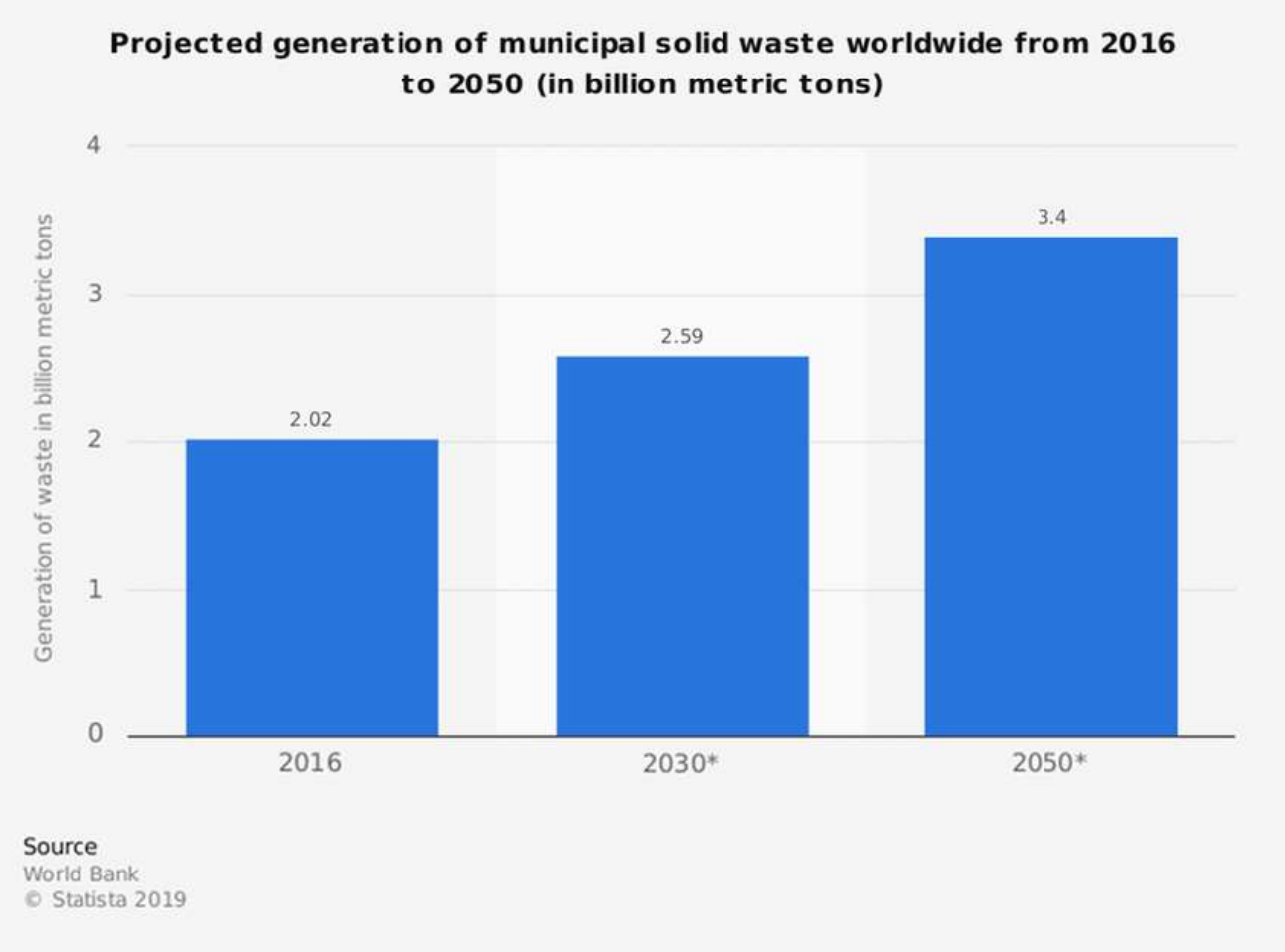
Waste generation by economic activities and households, EU, 2020
(% share of total waste)



Source: Eurostat (online data code: env_wasgen)

eurostat

- Municipal solid waste generation is predicted to grow from 2.1 billion tonnes in 2023 to 3.8 billion tonnes by 2050.



- In 2020, the global direct cost of waste management was an estimated USD 252 billion (~233.2 billion €.) When factoring in the hidden costs of pollution, poor health and climate change from poor waste disposal practices, the cost rises to USD 361 billion (~334 billion €).

- Without urgent action on waste management, by 2050 this global annual cost could almost double to a staggering USD 640.3 billion (592.4 billion €).

- Conversion made on August 1st

True 100% Zero waste is impossible

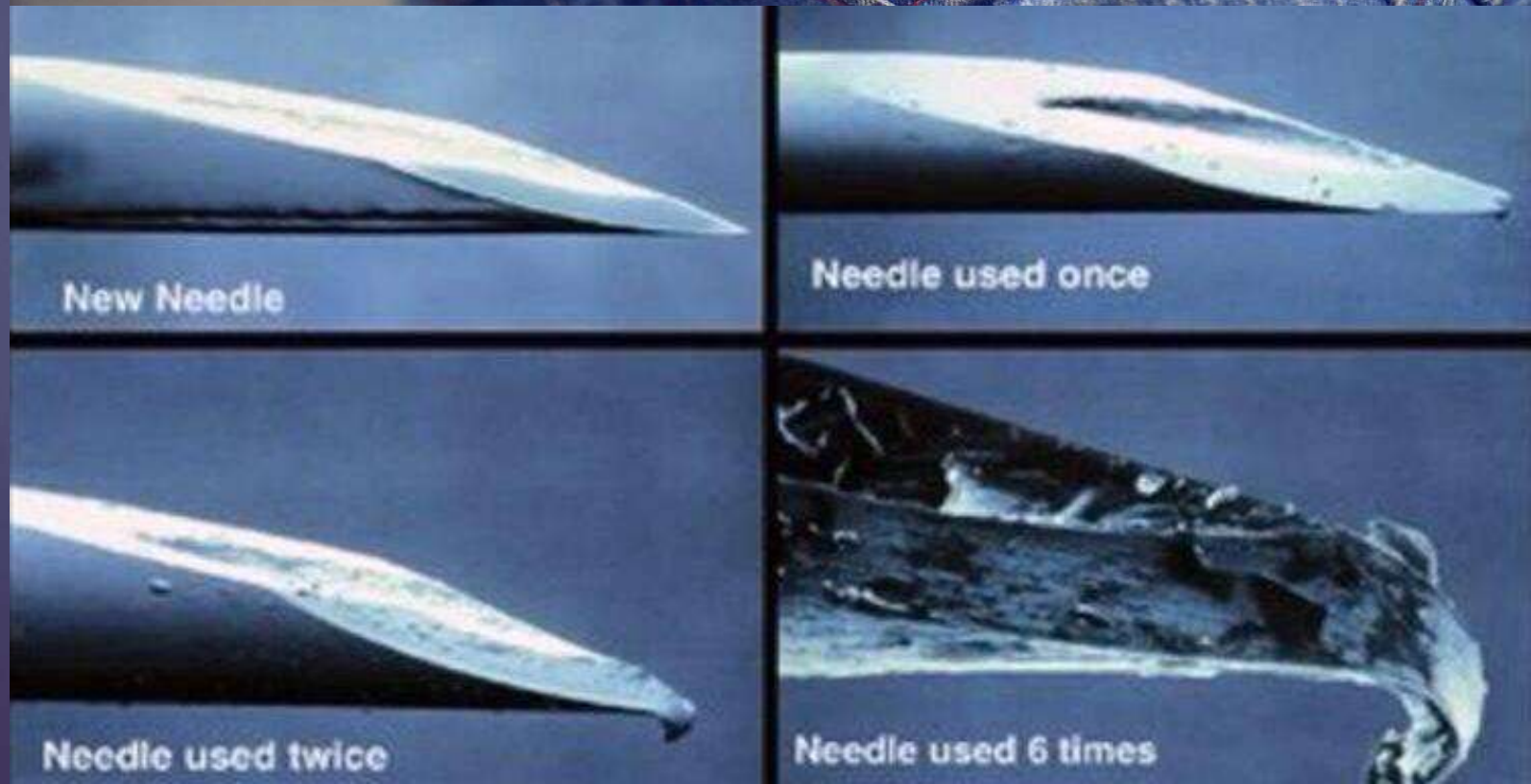
Why?

Main problems

- Publicly aviable information
- Hard to start
- Accessibility
- Time-consuming
- Health issues
- Recycling is limited
- Greenwashing

Information

Health issues



Choices → Lifestyle

- Bring Your own bag when shopping
- Compost
- Buy in bulk
- Buy recycled items
- Buy second hand
- Etc.

- Household items
- Recyclable options
- Mindfulness
- To know where the product is coming from
- Right to repair
- Etc.

No-package shops

Local markets

Repairs

Thank You for listening!

Food miles

and their impact on the environment

Stefan

Dżesika

Grześ

Agenda

Topics Covered

Topic 1 - what is a “food mile?”

Topic 2 - what is their impact?

Topic 3 - factors influencing food miles

Topic 4 - what can we do about it?

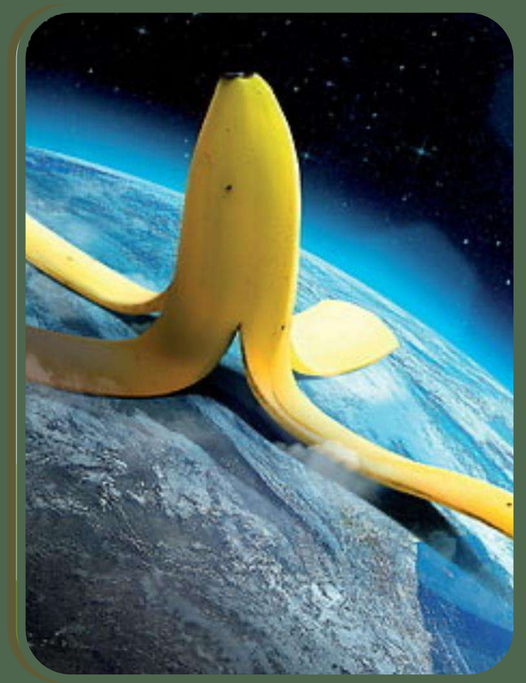
What is a food mile?

The concept of "food miles" refers to the distance food travels from the place of production to the consumer.

What is their impact?

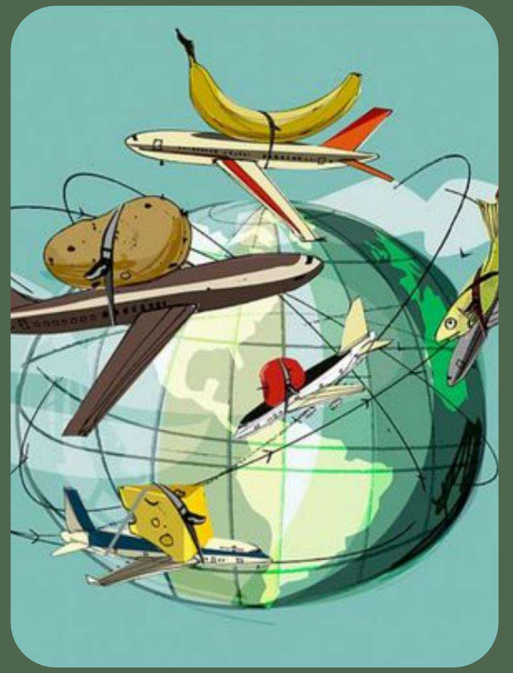
- Air pollution
- Greenhouse gas emissions
- Larger carbon footprint
- Energy consumption

Factors influencing food miles



Globalization

Standarization of products around the world.

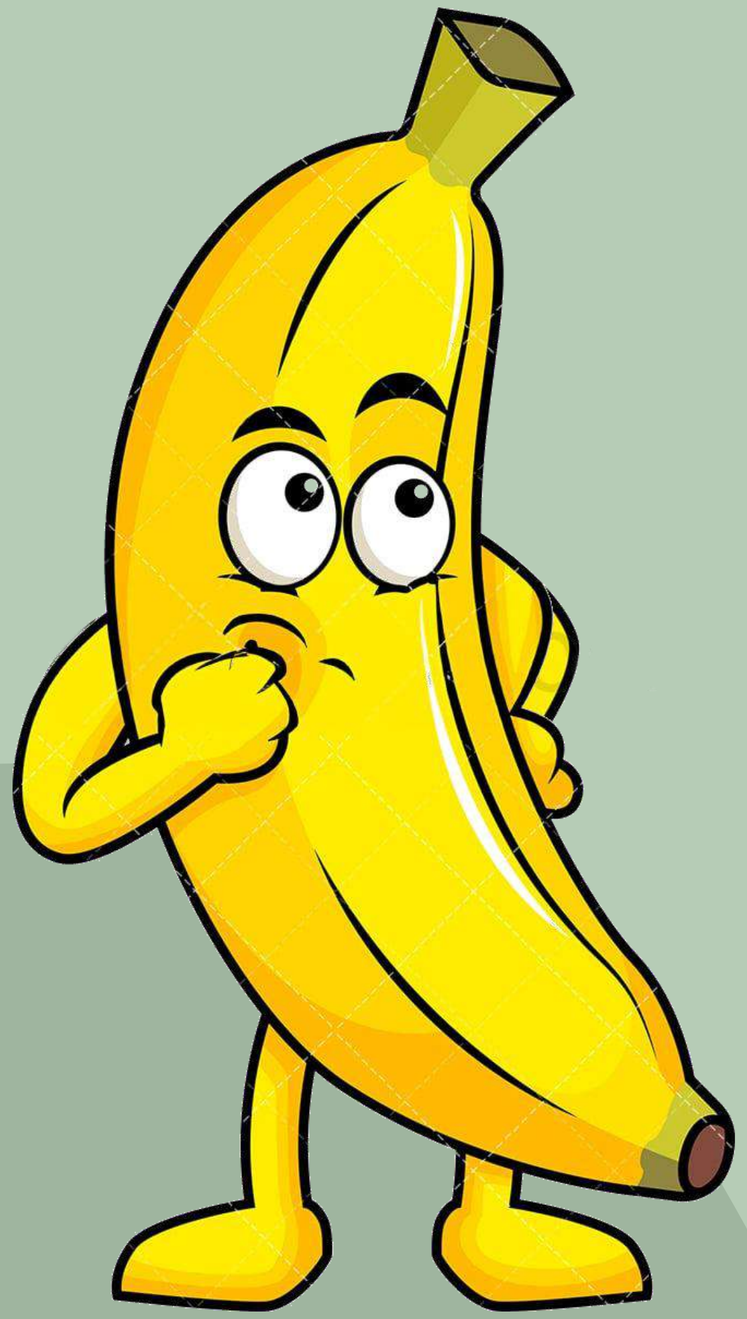


Production and Distribution

Briefly elaborate on what you want to discuss.

Consumers

Variety and convenience are king.



What can we do?

How to reduce food miles

Local sourcing

Local food travels less, it’s just that simple

Seasonal eating

Be a conscious consumer.

“To food mile or not to food mile, that is the question.”

— Aleksander Nowak

Are food miles bad?

More efficient

Distant, large farms may have a smaller CO2 footprint per ton of product

Just a small part

Travel only accounts for a small percentage of a product's impact on the environment

Last mile problem

Many emissions are caused by the final truck trip to the store, which is difficult to remove

Mode of transportation

Travel by air is much more harmful than by boat.

Food mile calculator

https://www.foodmiles.com/

Sources

1. https://www.bbcgoodfood.com/howto/guide/facts-about-food-miles
2. https://communities.springernature.com/posts/are-small-farms-better
3. https://www.thecommons.earth/blog/what-are-food-miles-and-what-are-their-climate-impact
4. https://www.carbonbrief.org/food-miles-have-larger-climate-impact-than-thought-study-suggests/

Thank you!

Bananas will never look the same from now.

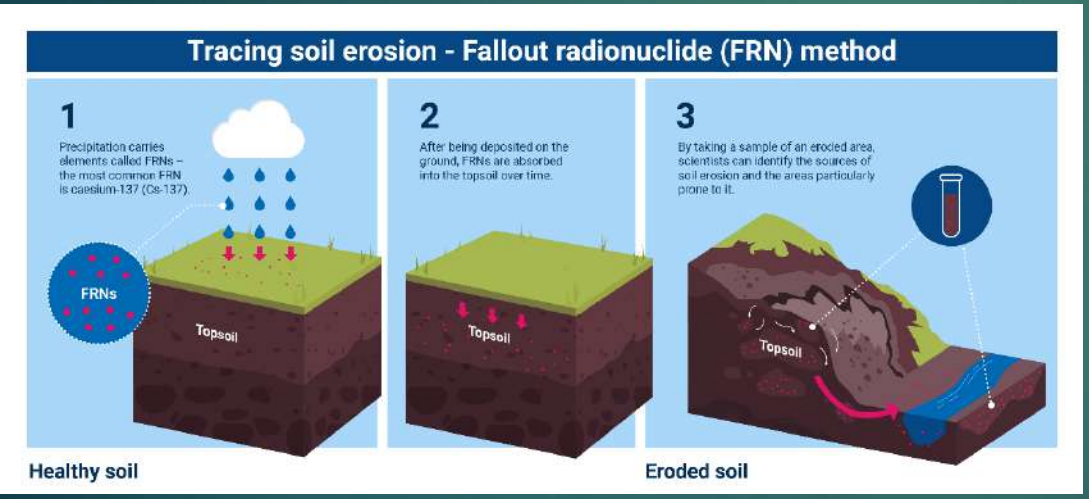
Topsoil erosion and Regenerative agriculture

ROMANIA

The Impact of Topsoil Erosion on Ecosystems

Topsoil erosion can have significant impacts on ecosystems. It can lead to:

- decreased soil fertility
- loss of biodiversity
- increased sedimentation in water bodies



The topsoil is rich in nutrients and organic matter, essential for plant growth. When eroded, these nutrients are lost, affecting plant productivity and the entire food chain in the ecosystem.

Additionally, erosion can alter the physical structure of the soil, affecting water retention and drainage, which further impacts plant growth and ecosystem stability.

Techniques for Preventing and Controlling Soil Erosion

Fundamental Principles of Regenerative Agriculture

Improving soil health:

- Promoting soil biology by adding compost, mulch and other organic materials.

Diversity of cultures:

- Crop rotation to prevent nutrient depletion and reduce specific diseases and pests.

Permanent ground cover:

- Using cover crops to protect soil from erosion, improve soil structure and add organic matter.

Minimizing soil disturbance:

- Reducing plowing and other forms of mechanical soil disturbance to maintain soil structure and avoid soil compaction.

Economic and social sustainability:

- Promoting agricultural practices that are economically viable for farmers.

Benefits of Regenerative Agriculture for the Environment and Communities

The Future of Agriculture: From Erosion to Regeneration

What is regenerative agriculture?

Regenerative agriculture is an evolution of conventional agriculture, reducing the use of water and other inputs, and preventing land degradation and deforestation. It protects and improves soil, biodiversity, climate resilience and water resources while making farming more productive and profitable.

Soil Erosion and Degradation

Half of the topsoil on the planet has been lost in the last 150 years. In addition to erosion, soil quality is affected by other aspects of agriculture. These impacts include compaction, loss of soil structure, nutrient degradation, and soil salinity. These are very real and at times severe issues.

The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers.

Causes:

- DEFORESTATION
- OVERGRAZING
- USE OF AGROCHEMICALS

Can we create the “perfect” farm?

What are the barriers to adopt regenerative agriculture?

If these practices benefit farmers and the planet, what is holding the world's farmers back from adopting these practices?