SDG 13:
CLIMATE ACTION

Erasmus+

Marketing Gate

End extreme poverty. Fight inequality and injustice. Fix climate change. Whoa. The Global Goals are important, world-changing objectives that will require cooperation among governments, international organizations and world leaders. It seems impossible that the average person can make an impact. Should you just give up?

No! Change starts with you!

On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — adopted by world leaders in September 2015 at an historic UN Summit — officially came into force.

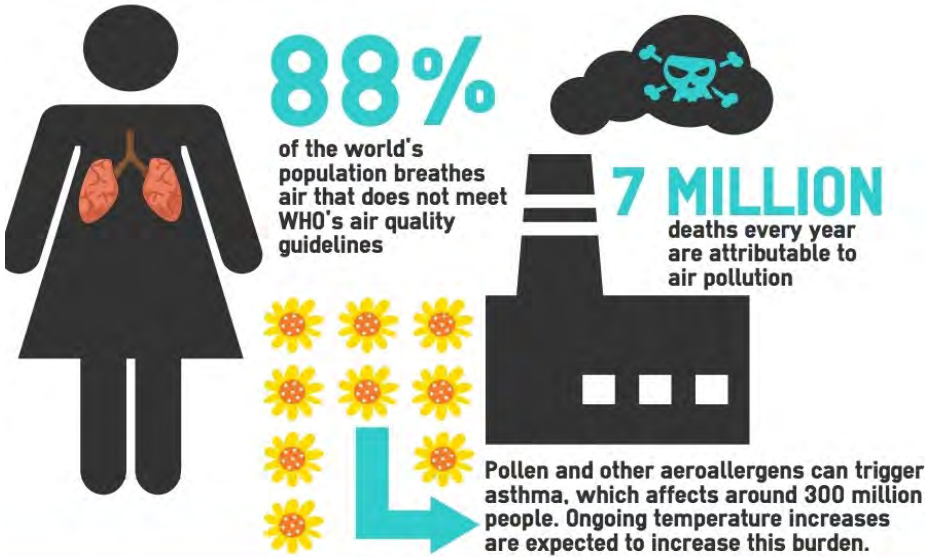
Goal 13: Facts and figures

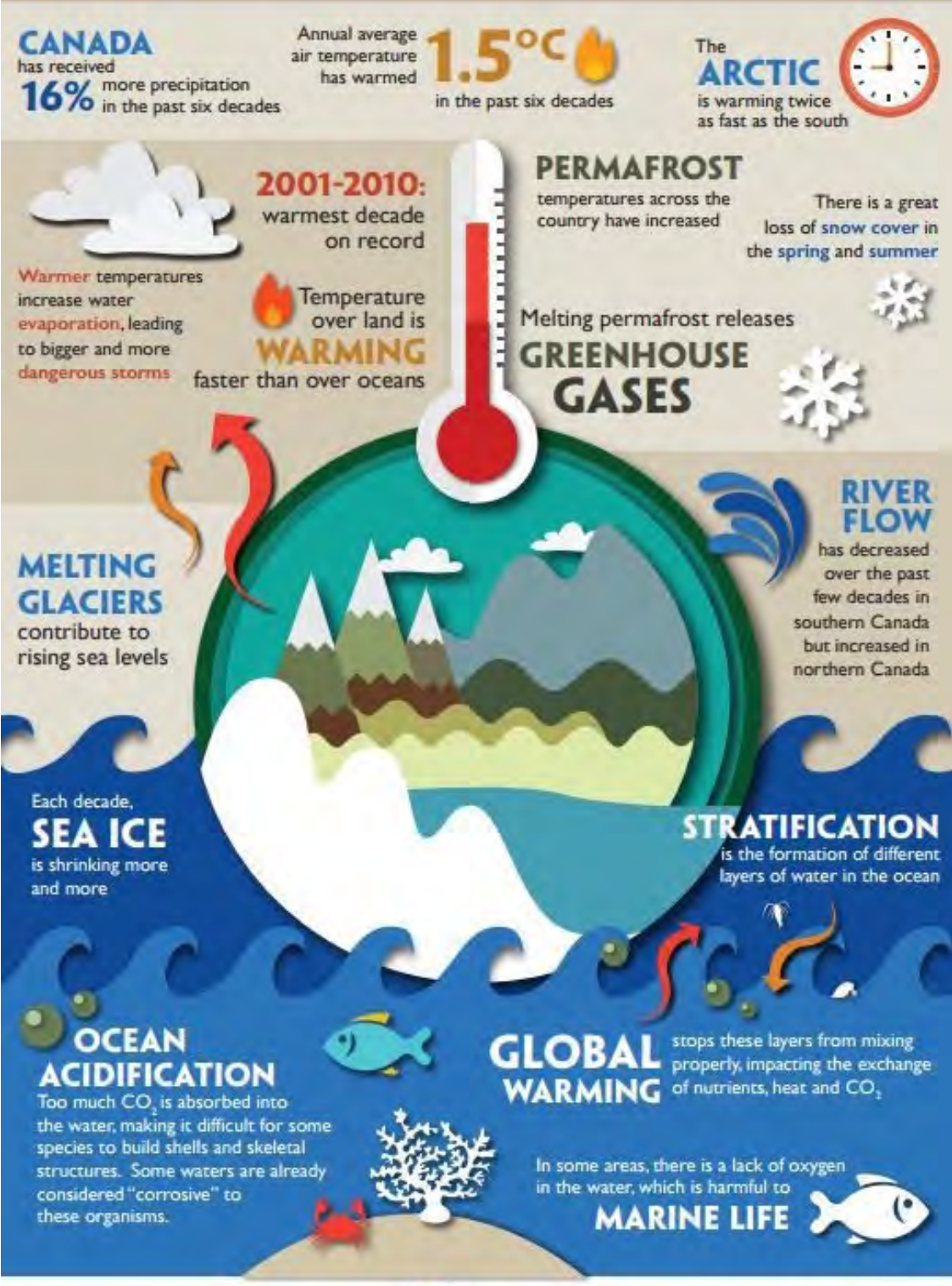
Thanks to the Intergovernmental Panel on Climate Change we know:

- From 1880 to 2012, average global temperature increased by 0.85° C. To put this into perspective, for each 1 degree of temperature increase, grain yields decline by about 5 per cent. Maize, wheat and other major crops have experienced significant yield reductions at the global level of 40 megatonnes per year between 1981 and 2002 due to a warmer climate.
- Oceans have warmed, the amounts of snow and ice have diminished and sea level has risen. From 1901 to 2010, the global average sea level rose by 19 cm as oceans expanded due to warming and ice melted. The Arctic's sea ice extent has shrunk in every successive decade since 1979, with 1.07 million km² of ice loss every decade
- Given current concentrations and on-going emissions of greenhouse gases, it is likely that by the end of this century, the increase in global temperature will exceed 1.5°C compared to 1850 to 1900 for all but one scenario. The world's oceans will warm and ice melt will continue. Average sea level rise is predicted as 24 – 30cm by 2065 and 40-63cm by 2100. Most aspects of climate change will persist for many centuries even if emissions are stopped
- Global emissions of carbon dioxide (CO2) have increased by almost 50 per cent since 1990
- Emissions grew more quickly between 2000 and 2010 than in each of the three previous decades
- It is still possible, using a wide array of technological measures and changes in behaviour, to limit the increase in global mean temperature to two degrees Celsius above pre-industrial levels
- Major institutional and technological change will give a better than even chance that global warming will not exceed this threshold

GOAL 13: Targets

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- Integrate climate change measures into national policies, strategies and planning
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities





For the whole Canada in a Changing Climate report, visit Adaptation.NRCan.gc.ca

Let's Talk Energy

Canada

13 CLIMATE ACTION

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

BEFORE COVID-19

GLOBAL COMMUNITY SHIES AWAY FROM COMMITMENTS REQUIRED TO REVERSE THE CLIMATE CRISIS

2019 WAS THE **SECOND WARMEST YEAR** ON RECORD

GLOBAL TEMPERATURES ARE PROJECTED TO RISE BY **UP TO 3.2°C BY 2100**

ONLY **85 COUNTRIES** HAVE NATIONAL **DISASTER RISK REDUCTION STRATEGIES** ALIGNED TO THE SENDAI FRAMEWORK

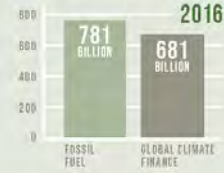
COVID-19 IMPLICATIONS

COVID-19 MAY RESULT IN A 6% DROP IN GREENHOUSE GAS EMISSIONS FOR 2020

STILL SHORT OF **7.6% ANNUAL REDUCTION** REQUIRED TO LIMIT GLOBAL WARMING **TO 1.5°C**

CLIMATE FINANCE: INVESTMENT IN FOSSIL FUELS

CONTINUES TO BE HIGHER THAN INVESTMENT IN CLIMATE ACTIVITES

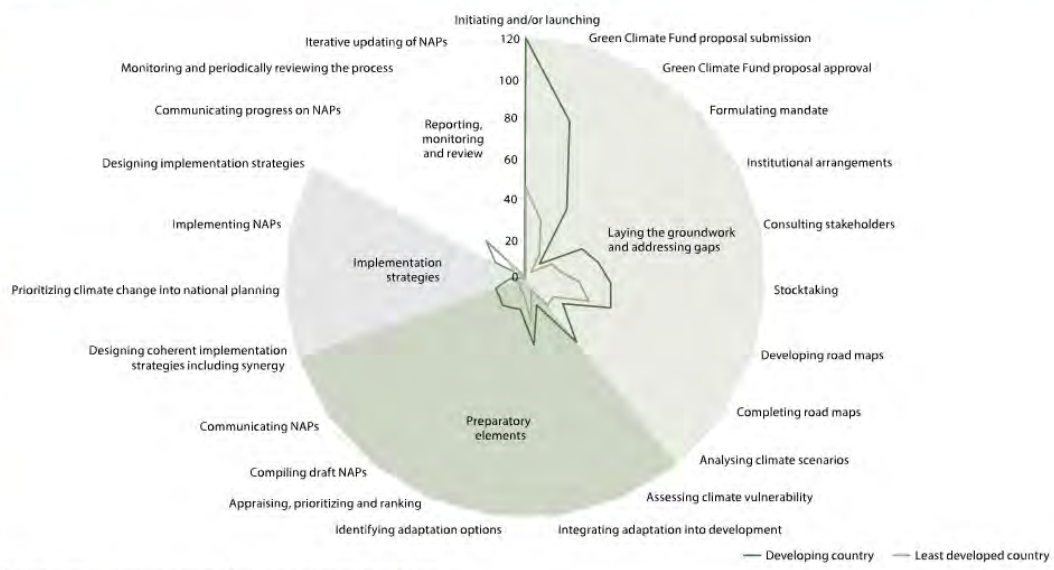


CLIMATE CHANGE CONTINUES TO EXACERBATE THE FREQUENCY AND SEVERITY OF **NATURAL DISASTERS**

AFFECTING MORE THAN **39 MILLION PEOPLE** IN 2018

National adaptation plans (NAPs) help countries achieve the global goal on adaptation under the Paris Agreement – namely, to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change. In 2019, at least 120 of the 153 developing countries had undertaken activities to formulate and implement NAPs, an increase of 29 countries over the previous year. Eighteen countries, including five LDCs and four small island developing States, have completed and submitted their NAPs to the United Nations Framework Convention on Climate Change Secretariat, while many others are at various stages in the process.

Measures undertaken by developing country parties in the process of formulating and implementing national adaptation plans, as of December 2019[1] (number of countries)



[1] https://www4.unfccc.int/sites/NAPC/Pages/NAPProgress2019.aspx.

Funding for the formulation of NAPs is provided by the Green Climate Fund, through its Readiness and Preparatory Support Programme, and by the Least Developed Countries Fund. As of December 2019, 81 countries had submitted 83 proposals totalling $203.8 million in requested support from the Green Climate Fund.

Of these countries, 29 (35 per cent) were LDCs. A total of 40 proposals had been approved, 14 of them (35 per cent) from LDCs. Fewer proposals (12 as of 3 October) were submitted in 2019 than in previous years (22 in 2018 and 42 in 2017).

DIAGNOSIS:

Doctors and health professionals agree that climate change poses a serious threat to our health and health systems.

PRESCRIPTION:

Economists agree on the lowest-cost way to reduce the emissions that cause climate change.

1

CLIMATE CHANGE IS HARMFUL TO OUR HEALTH.
The evidence is clear: Climate change presents severe and urgent risks to the health of Canadians. The World Health Organization calls it the greatest human health threat of the 21st century.

CARBON PRICING SLOWS CLIMATE CHANGE.
There is plenty of evidence that carbon pricing works. It has reduced carbon emissions in British Columbia, several U.S. states, and across Europe for over a decade.

2

THE HEALTH EFFECTS OF CLIMATE CHANGE ARE IMMENSE.
Climate change intensifies the spread of Lyme Disease, increases the rate of heat stroke, affects mental health, worsens hay fever seasons, and compromises nutrition and food security.

THE SIDE-EFFECTS OF CARBON PRICING ARE VERY SMALL.
Carbon pricing will have minimal impact on the Canadian economy. Governments have carefully designed carbon pricing to protect investment, jobs, and business competitiveness.

3

CLIMATE CHANGE WILL AFFECT VULNERABLE CANADIANS THE MOST.
Negative health outcomes from climate change will disproportionately affect lower-income groups, First Nations, Inuit, Métis, and Northern Communities, and Canadians with chronic illnesses.

CARBON REVENUES IMMUNIZE VULNERABLE CANADIANS AGAINST INCREASED COSTS.
By returning revenues via household rebates, tax cuts, and low-carbon investments like public transit, well-designed carbon pricing can help make life more affordable for lower-income groups.

4

THE HEALTH IMPACTS OF CLIMATE CHANGE ARE LONG-TERM.
B.C.'s worst wildfire seasons on record were 2017 and 2018. Millions of Canadians inhaled poor-quality, asthma-inducing air for weeks. Wildfires will worsen with further climate change.

CARBON PRICING WORKS BEST OVER THE LONG TERM.
It creates a clear, predictable incentive to reduce greenhouse gas emissions, and it works better over time. Carbon pricing will spark the innovation we need to transition to a cleaner, healthier economy.

5

CARBON PRICING PROTECTS OUR HEALTH.
The Lancet, the world's top medical journal, calls carbon pricing the best single treatment for climate change. It decreases greenhouse gas emissions and air pollution, saving lives and healthcare dollars.

CARBON PRICING PROTECTS OUR ECONOMY.
Over 3,500 and 27 Nobel Prize winners call carbon pricing the most cost-effective lever to reduce emissions at the necessary scale and speed. 46 jurisdictions already prescribe it as part of a healthy response to climate change.

References: Canada's Ecofiscal Commission: 10 myths about carbon pricing in Canada (2019); Cuevas & Haines: Health benefits of a carbon tax (2016); Economist's Statement on Carbon Dividends (2019); Ford et al: Vulnerability of Aboriginal health systems in Canada to climate change (2010); Government of British Columbia: Wildfire Averages (2018); Hibbard et al: The Economic Impact of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States (2018); Lawley & Thivierge: Refining the Evidence: British Columbia's Carbon Tax and Household Gasoline Consumption (2016); Martin et al: The impact of the European Union Emissions Trading Scheme on regulated firms: What is the evidence after ten years? (2015); Nelder et al: The continued rise of Lyme disease in Ontario, Canada (2018); Popp: A blueprint for going green: The best policy mix for promoting low-emission technology (2016); The Lancet: Countdown on health and climate change: from 25 years of inaction to a global transformation for public health (2018); Wheeler & Von Braun: Climate change impacts on global food security (2013); WHO: WHO calls for urgent action to protect health from climate change (2019)

CANADIAN MEDICAL ASSOCIATION
CANADIAN PUBLIC HEALTH ASSOCIATION
CAPE Canadian Association of Physicians for the Environment
CANADA'S **ECOFISCAL** COMMISSION
Practical solutions for growing prosperity

Global emissions of CO_2

HAVE INCREASED BY ALMOST 50 %

since 1990

SDG 13: CLIMATE ACTION

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Co-funded by the Erasmus+ Programme of the European Union

CLIMATE CHANGE
IN THE CORAL TRIANGLE

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Atmospheric concentrations of CO_2 are 37% higher than they have been at any time during the last 650,000 years

ONE WORLD, T

In one future, the international community continues down the current track towards catastrophic climate change. The biological treasures of the Coral Triangle are destroyed while poverty increases, food security fails and economies suffer.

1-4°C — Expected temperature increase of the sea in the Coral Triangle by 2100

WWF

2°C — Temperature increase above which most corals will be eliminated

WWF

Acidified oceans

As greater amounts of carbon dioxide dissolve into the sea, corals are less able to build and maintain reefs - with dramatic consequences for reefs' rich marine life.

Severe weather

Already in the pathway of typhoons and cyclones, the Philippines and the Solomon Islands are likely to experience variations in the intensity and severity of these weather events as a result of climate change.

Low product

There could be a 80%
ability of the Coral Tri
environment to provid
by 2100 if effective act
taken on climate chan

WWF/Unive

as been a constant feature of our planet, and over long
f time, corals and the reefs have slowly adapted to these
Today, what makes our situation so perilous is that the
imate change has accelerated. Current rates may be as
100-1,000 faster than anything the planet has experienced
past one million years.

TWO FUTURES

In the other future, the build-up of greenhouse gases is brought under control, and Coral Triangle nations also invest in solutions that reduce other environmental stresses.

WHY THERE IS HOPE

Natural advantage

High levels of biodiversity, coupled with fast rates of growth and recovery, put many Coral Triangle ecosystems in a favorable position to be resilient to climate change.

Political will

The leaders of the 6 countries of the Coral Triangle have made adaptation to climate change one of the top priorities for the region through the Coral Triangle Initiative.

Knowledge of solutions

Establishing and managing effective marine protected areas, reducing coastal destruction, and supporting local people's involvement in sustainable management have all been proven to reduce stress on nature. These solutions also build the resilience of ecosystems and local communities.

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Sea level rise

The Coral Triangle may experience a sea level rise of 30-60 cm by 2100.

UN IPCC

People who rely on the sea for a living are feeling the impacts of climate change

"The sea has not been good to us"

Fisher Chris Kong from Kudat, Malaysia, has seen his catch dwindle every year because of shifts in the monsoon winds, cutting short his fishing season.

The Coral Triangle - the nursery of the seas - is the most diverse marine region on the planet, covering some 6 million km² of ocean across 6 countries in the Asia-Pacific region. This ecological wonder is home to 76% of the world's reef-building coral species and 6 out the 7 known species of marine turtles.

European Commission

What is the European Green Deal?

December 2019
#EUGreenDeal

The European Green Deal is about **improving the well-being of people**. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.

The EU will:

- Become climate-neutral by 2050
- Protect human life, animals and plants, by cutting pollution
- Help companies become world leaders in clean products and technologies
- Help ensure a just and inclusive transition

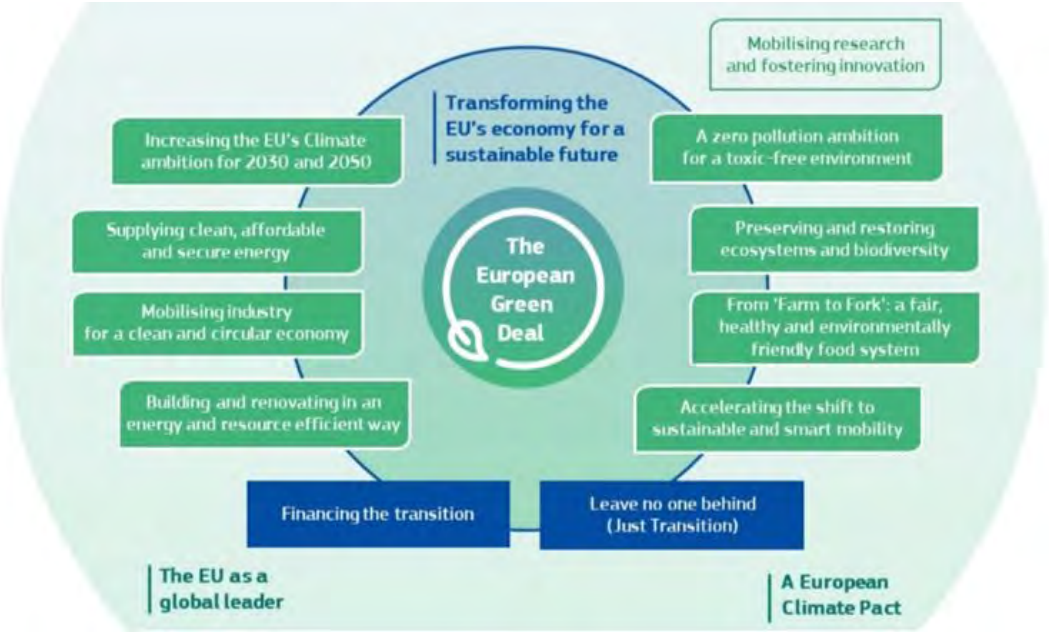
"The European Green Deal is our new growth strategy. It will help us cut emissions while creating jobs."

Ursula von der Leyen, President of the European Commission

"We propose a green and inclusive transition to help improve people's well-being and secure a healthy planet for generations to come."

Frans Timmermans, Executive Vice-President of the European Commission


CLIMATE PACT
AND CLIMATE LAW
INVESTING IN SMARTER, MORE SUSTAINABLE TRANSPORT
STRIVING FOR GREENER INDUSTRY
ELIMINATING POLLUTION
ENSURING A JUST TRANSITION FOR ALL
FINANCING GREEN PROJECTS
MAKING HOMES ENERGY EFFICIENT
LEADING THE GREEN CHANGE GLOBALLY
FROM FARM TO FORK
PROTECTING NATURE
PROMOTING CLEAN ENERGY
THE EUROPEAN GREEN DEAL


Mobilising research and fostering innovation
Transforming the EU's economy for a sustainable future
Increasing the EU's Climate ambition for 2030 and 2050
A zero pollution ambition for a toxic-free environment
Supplying clean, affordable and secure energy
Preserving and restoring ecosystems and biodiversity
The European Green Deal
Mobilising industry for a clean and circular economy
From 'Farm to Fork': a fair, healthy and environmentally friendly food system
Building and renovating in an energy and resource efficient way
Accelerating the shift to sustainable and smart mobility
Financing the transition
Leave no one behind (Just Transition)
The EU as a global leader
A European Climate Pact

CLIMATE CHANGE

CLIMATE CHANGE IMPACTS EVERYONE'S HEALTH

Around the world, climate change is one of the greatest threats to our health today.

Climate change can lead to temperature-related illness and death, infectious diseases, injuries and illnesses due to extreme weather events, and water borne diseases.

Children, the elderly, the poor, and people with underlying health conditions face the greatest risks from climate change.

WHILE SEEKING TO DO GOOD, HEALTH CARE HAS A RESPONSIBILITY TO AVOID DOING HARM

Health care represents 20% of the U.S. and 10% of the global economies.

Health care is the second largest energy consumer in the U.S. and a major contributor to greenhouse gases.

HEALTH CARE IS IN A UNIQUE POSITION TO ADDRESS CLIMATE CHANGE

Hospitals need to prepare for extreme weather events and be anchors of resilience in their communities.

Health systems should reduce their own carbon footprint and make the transition to renewable energy and low carbon supply chains.

Just as they did with tobacco, health professionals can play a critical role as messengers for energy and climate policies that protect health.

HEALTH CARE'S ECONOMIC, POLITICAL, AND MORAL INFLUENCE CAN REBRAND CLIMATE CHANGE AS A PUBLIC HEALTH ISSUE

Health benefits and climate mitigation cost savings can drive public policy and investment decisions.

Health care c an validate the transition to a renewable energy economy.

Everyone can join in efforts to reduce the threat of climate change and help build more resilient and healthier communities.

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THE CLIMATE IS CHANGING. SO SHOULD WE!

#ACTNOW

YouABLE