

A satellite view of Earth from space, showing a curved horizon with a blue sky and white clouds. The landmasses are visible in shades of brown and green. A large, semi-transparent hexagon is overlaid on the image, containing the title text.

Klimaatverandering - Uitdagingen en Kansen voor onze Gezondheid

Lucie Blondé
2021

BRONNEN



World Health
Organization



COP24 SPECIAL REPORT

HEALTH &
CLIMATE
CHANGE

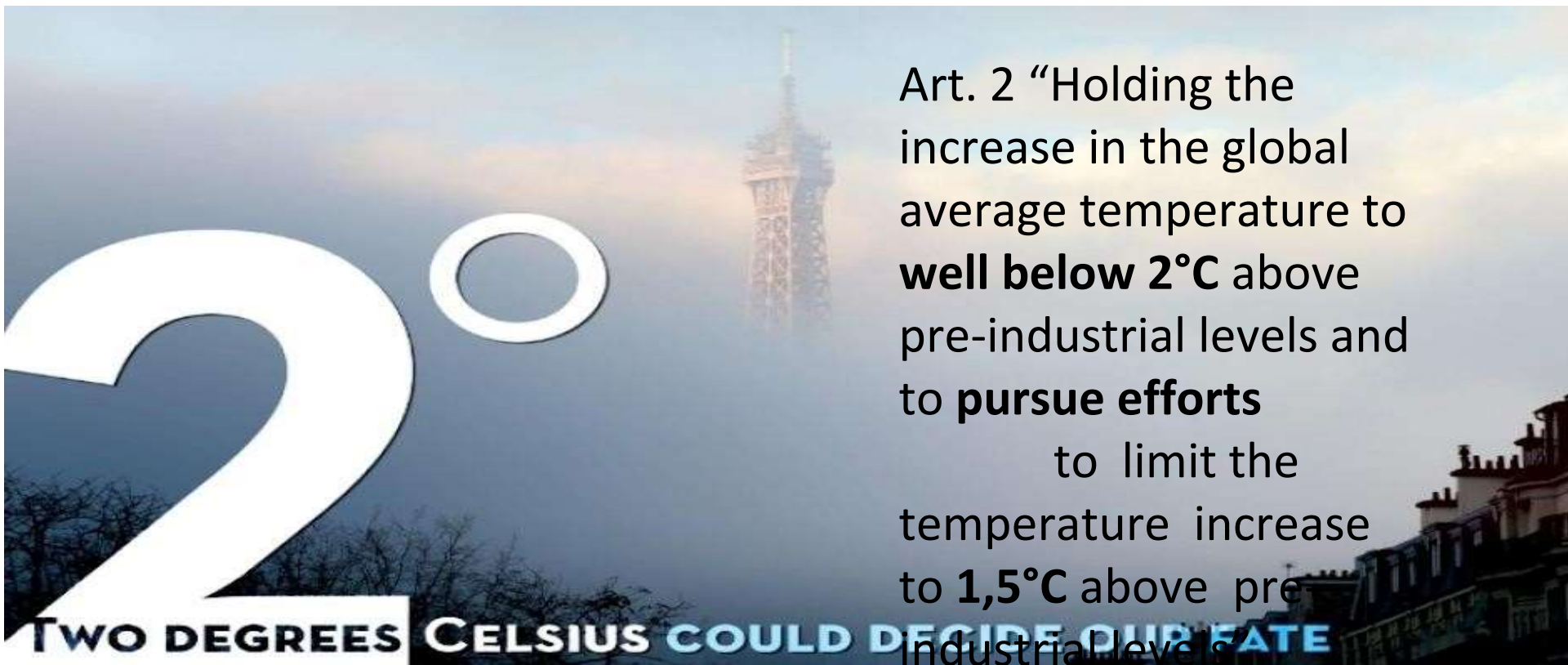




United Nations
Framework Convention on
Climate Change



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



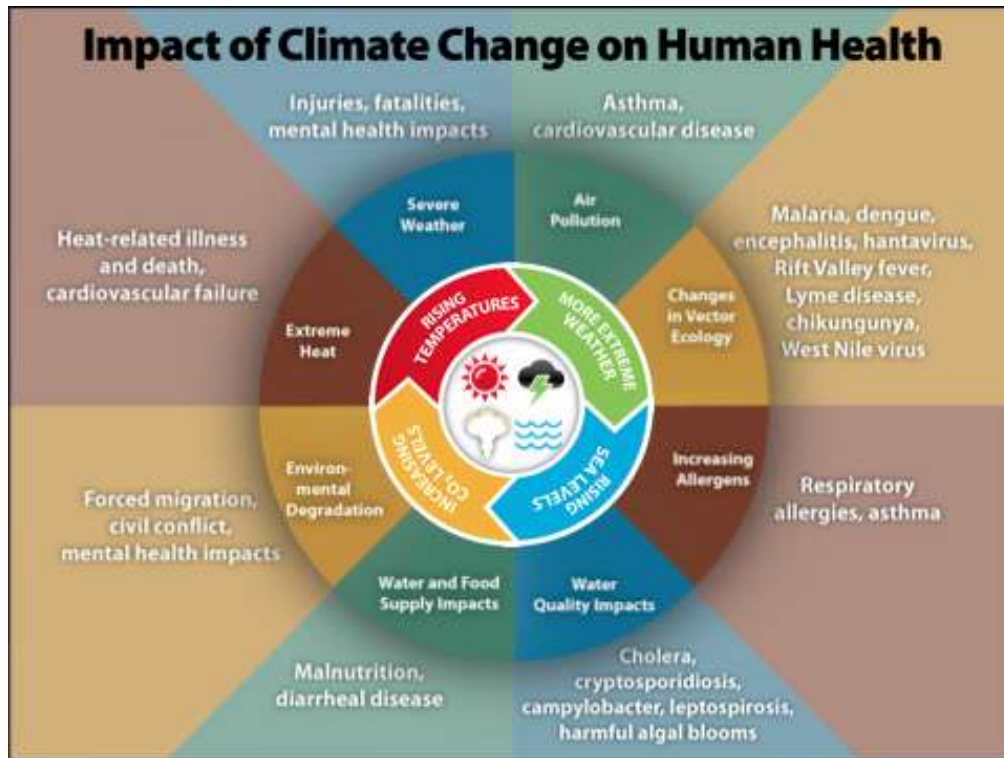
Art. 2 “Holding the increase in the global average temperature to **well below 2°C** above pre-industrial levels and to **pursue efforts** to limit the temperature increase to **1,5°C** above pre-industrial levels”

TWO DEGREES CELSIUS COULD DECIDE OUR FATE

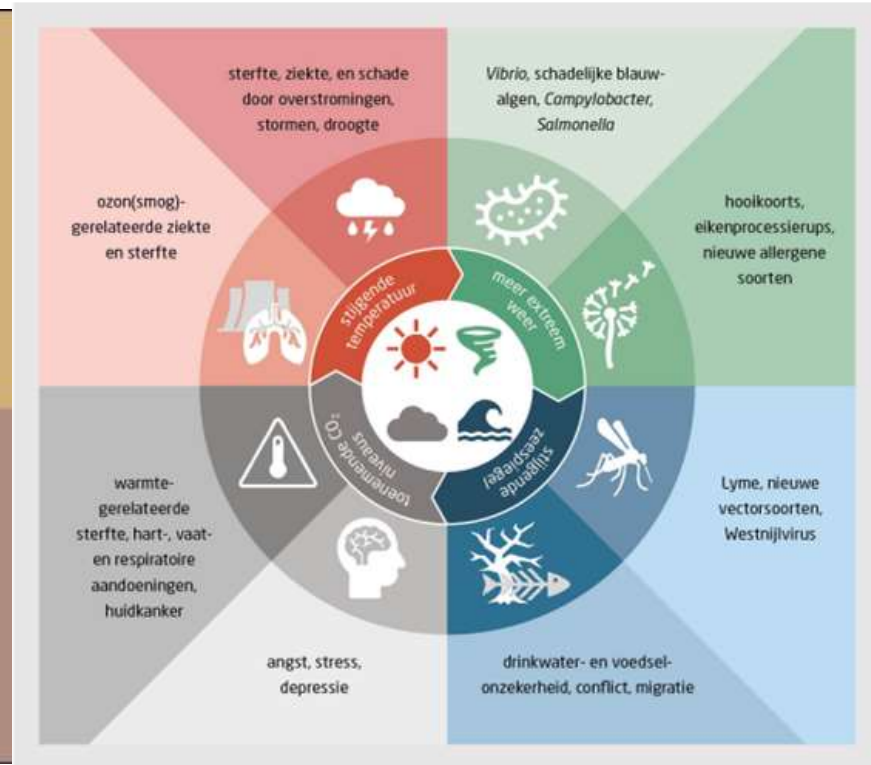
AGENDA

- A. Gezondheid en klimaat - StaVaZa
- B. Klimaatverandering en ongelijkheid
- C. Gezondheidsvoordelen van een
koolstofarme samenleving
- D. Conclusies
- E. Actie?

A. GEZONDHEID EN KLIMAAT



Gevolgen van klimaatverandering voor de gezondheid in de wereld (Bron: The Lancet)



Gevolgen van klimaatverandering voor de gezondheid in Nederland
Bron: RIVM rapport 2020:E.F. Hall et al



Figure 3

Climate change impacts health both directly and indirectly, but is strongly mediated by environmental, social and public health determinants. From references (14, 28-32).



DIRECT IMPACTS

- Storm
- Drought
- Flood
- Heatwave
- Temperature Change
- Wildfires



INDIRECT IMPACTS

- Water Quality
- Air Quality
- Land Use Change
- Ecological change

MEDIATING FACTORS



ENVIRONMENTAL

- Geography
- Baseline weather
- Soil / dust
- Vegetation
- Baseline air / water quality



SOCIAL

- Loss of habitation
- Poverty
- Displacement
- Conflict
- Age and gender



RESILIENCY

- Early-warning system
- Socioeconomic status
- Health and nutrition
- Primary health care

An aerial photograph showing a residential neighborhood completely inundated with floodwater. The water is a murky, brownish-grey color, reaching the roofs of many houses and covering the streets and yards. The houses are mostly two-story brick buildings with dark roofs. Some trees are visible, their branches partially submerged. In the center of the image, there is a large, semi-transparent hexagonal overlay with a black border. Inside this hexagon, the text "1. Extreme weersomstandigheden" is written in a bold, white, sans-serif font. The overall scene depicts a severe weather event, likely a heavy rainstorm or a river overflow, causing significant flooding in a populated area.

1. Extreme weersomstandigheden



1. Verwondingen en overlijdens
2. Mentale gezondheidsproblemen

- I
N
D
I
R
E
C
T
3. Contaminatie van water
 4. Schade aan de infrastructuur (ziekenhuizen)
 5. Schade aan de oogsten
 6. Migratie en conflicten



CASE Study: Cholera in Mozambique

Following Cyclone Idai devastation, nearly 900,000 people will receive the vaccine from the Gavi-funded stockpile.

GENEVA/BEIRA, 3 April 2019 – An oral cholera vaccination campaign to protect survivors of Cyclone Idai begins today in Beira, Mozambique. Funded by Gavi, the Vaccine Alliance, the campaign will be carried out by the Mozambique Ministry of Health, with support from the World Health Organization (WHO) and other partners, including UNICEF, the International Federation of the Red Cross and Red Crescent Societies (IFRC), Médecins Sans Frontières (MSF) and Save the Children.

There has already been one reported cholera death and almost 1,500 reported cases following the cyclone, which caused severe flooding in Mozambique, Zimbabwe, Malawi and Madagascar after making landfall in March. Nine cholera treatment centres, with 500-bed capacity, are already admitting patients.

“Cyclone Idai’s trail of devastation has left the city of Beira’s water and sanitation infrastructure in ruins, providing the perfect conditions for cholera to spread,” said Gavi CEO, Dr Seth Berkley. “This cyclone has already caused enough devastation and misery across south east Africa; we have to hope these vaccines will help stop a potentially major outbreak and prevent yet more suffering.”

A photograph of a pond with blue-green algae (cyanobacteria) growing on the water surface. A white rectangular warning sign with rounded corners is partially submerged. The sign has the text 'Blauwalg' in large bold letters, followed by 'contact met water' and 'vermijden!' in smaller bold letters. A black hexagonal graphic is overlaid on the right side of the image, containing the title '2. Water & Voedsel kwaliteit'. In the bottom left corner, there is a logo for 'EEMSKRANT.NL' featuring a stylized wave icon.

Blauwalg
contact met water
vermijden!

2. Water & Voedsel kwaliteit

Waterkwaliteit

1. Verhoogde temperaturen

- verminderde waterkwaliteit
- diarree en andere

1. Hogere zeespiegel en overstromingen

- salinisatie van vers water en grondwater
- effect op gewassen + gezondheid

1. Hevige regenval

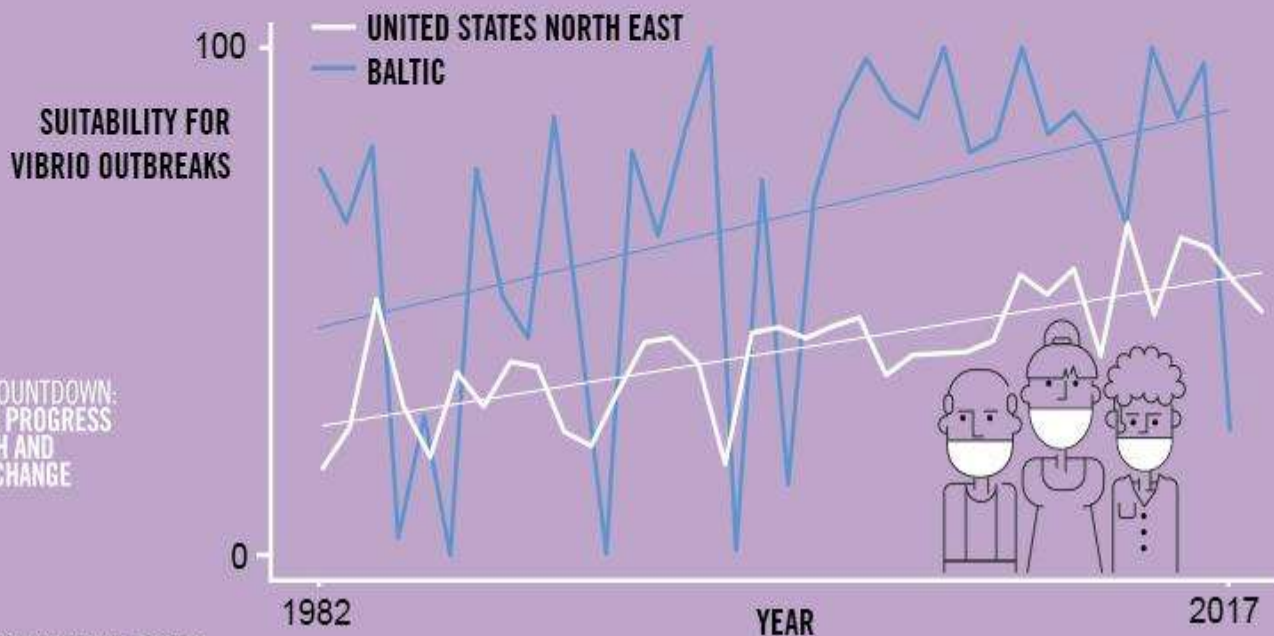
- grotere exposure aan pathogenen
- habitat voor muggen



Coastal areas of the Baltic and the US Northeast are now over 25% more suitable for the pathogen that transmits cholera than they were in the 1980s



LANCET COUNTDOWN:
TRACKING PROGRESS
ON HEALTH AND
CLIMATE CHANGE





Casestudy: droogte in Ethiopië

A detailed close-up of a mosquito, likely a species of Anopheles, is the central focus. The mosquito is positioned diagonally, with its head at the top left and its abdomen extending towards the bottom right. Its legs are spread out, and its wings are partially visible. The background is a soft, out-of-focus green, suggesting a natural environment. Overlaid on this image are several dark green hexagonal shapes with black outlines. These hexagons contain white text: 'Lyme' in the top left, 'Dengue' on the middle left, 'Schisto' in the bottom left, 'Malaria' in the bottom right, and '...' in the top right. In the center, the text '3. Vektoren' is prominently displayed in a large, white, sans-serif font. The overall composition is clean and informative, likely intended for a presentation or educational material about vector-borne diseases.

Lyme

...

Dengue

3. Vektoren

Schisto

Malaria

4. Conflict & Migratie



The [Global Compact on Refugees](#), adopted by an overwhelming majority in the UN General Assembly in December 2018 recognizes that ‘climate change, environmental degradation and natural disasters increasingly interact with the drivers of refugee movements.’

31.1 million displaced people in 2016 – of which 76% consequence of weather events (UNHCR)

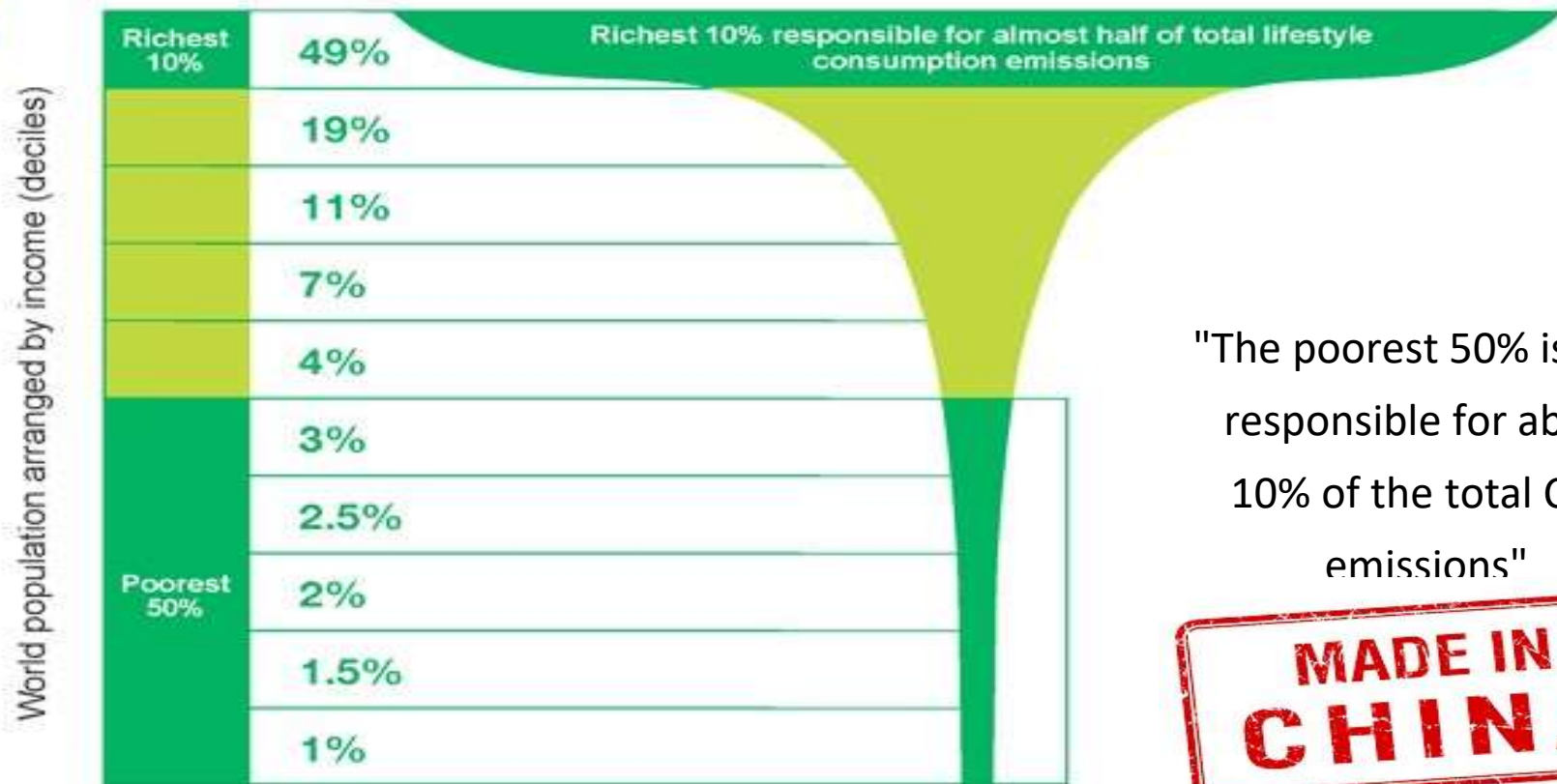
Table 1: Locations from which populations are migrating now only because of climate change

	Population size	Notes on causes of migration
Carteret Islands, Papua New Guinea	1200 people	Migrating due to sea-level rise ^{7,8}
Alaska*	3512 people	Changing ice conditions leading to coastal erosion and due to permafrost melt, destabilising infrastructure ^{9,10}
Isle de Jean Charles, LO, USA	25 homes	Coastal erosion, wetland loss, reduced accretion, barrier island erosion, subsidence, and saltwater intrusion were caused by dredging, dikes, levees, controlling the Mississippi River, and agricultural practices; climate change is now bringing sea-level rise

B. Klimaatverandering & Ongelijkheid



Percentage of CO₂ emissions by world population



"The poorest 50% is only responsible for about 10% of the total CO₂ emissions"





EXPOSED

Energy Poverty in Europe

www.coldathome.today/exposed

1 NO
POVERTY



13 CLIMATE
ACTION



7 AFFORDABLE AND
CLEAN ENERGY



3 GOOD HEALTH
AND WELL-BEING



C. Voordelen van een koolstofarme samenleving

THE LANCET



THREAT

OPPORTUNITY



“Tackling climate change could be the greatest global health opportunity of the 21st century” - June 2015



EUROPEAN ENVIRONMENT
AND HEALTH PROCESS



Economic cost of the health impact of air pollution in Europe

*Clean air, health
and wealth*

CONCLUSIES

A. Klimaatverandering veroorzaakt een belangrijke morbiditeit en mortaliteit in de wereld en ook in België.

Dit zal in de toekomst toenemen en de gezondheid van vele miljoenen mensen bedreigen

B. Sociale rechtvaardigheid is een kernaspect van duurzaam klimaatbeleid

C. De aanpak van klimaatverandering is tegelijkertijd een geweldige kans om de volksgezondheid te verbeteren.

→ Persoonlijk: Zorgprofessionals hebben een rol bij de aanpak van klimaatverandering

The background of the image is a vibrant sunset or sunrise scene. The sky is filled with wispy, golden-orange clouds, and the sun is a bright, glowing orb on the horizon. Below the horizon, a vast expanse of white, fluffy clouds stretches across the frame, resembling a sea of clouds. In the bottom right corner, the dark silhouette of a mountain peak is visible. Overlaid on this scene are six semi-transparent hexagonal boxes, each containing a white text label. The boxes are arranged in a loose, non-linear pattern across the upper and middle portions of the image.

Inform

Support

(Des)invest

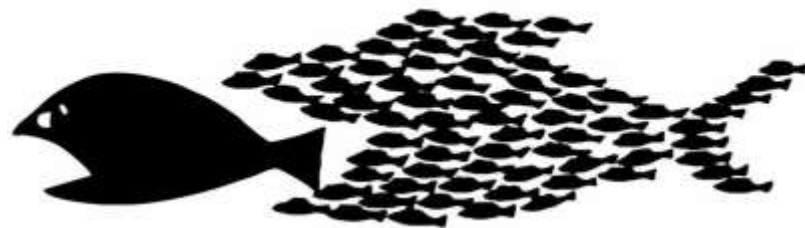
Debate

Pressure

**Work
Together**



ORGANIZE





“With both health and the climate crisis engaging such heightened interest, an opportunity exists for health professionals to bring the inextricable links between them into focus.”

**Editorial: Health and climate change:
making the link matter**

THE LANCET

The best science for better lives

1. Watts N, Amann M, Ayeb-Karlsson S, et al. The Lancet Countdown on health and climate change: from 25 years of inaction to a global transformation for public health. Lancet. 2018;391:581-630. doi:10.1016/S0140-6736(17)32464-9. Medline
2. COP24 specialreport: health and climate change. Genève: World Health Organization; 2018.
3. United Nations Framework Convention on Climate Change. Fact sheet: Climate change science - the status of climate change science today (2011). https://unfccc.int/files/press/backgrounders/application/pdf/press_factsh_science.pdf, geraadpleegd op 4 juni 2021.
4. Huynen MM, van Vliet AJ. Klimaatverandering en gezondheid in Nederland. Ned Tijdschr Geneesk. 2009;153:A1515 Medline.
5. Huynen M, et al. Kennisagenda Klimaat en Gezondheid. Den Haag: ZonMw; 2019.
6. Watts N, Amann M, Arnell N, et al. The 2020 report of The Lancet Countdown on health and climate change: responding to converging crises. Lancet. 2021;397:129-70. doi:10.1016/S0140-6736(20)32290-X. Medline
7. IPCC. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Genève: IPCC; 2014.
8. De Meer G, et al. GGD-richtlijn medische milieukunde: Gezondheidsrisico's van zomerse omstandigheden. Publicatienr 609400007/2012. Bilthoven: RIVM; 2012.
9. Nationale klimaatadaptatiestrategie 2016 (NAS). Den Haag: Ministerie van Infrastructuur en Milieu; 2016.