British Embassy
Vienna



Virtual Expert Talk on Health and Climate: a transition towards a resilient future

October 13th 2020, 14:00-16:00 CET

1) Background

The current global pandemic of covid-19 underlines our need for resilient, sustainable and healthy societies. Initiating a **transformation in the intersection of climate and health** is an appealing opportunity to implement health targets aligned with the targets of the Paris Climate Agreement and the United Nations Sustainable Development Goals. In this context, the <u>British Embassy Vienna</u> and the <u>Climate Change Centre Austria</u> were pleased to host a virtual expert talk on public health and climate change.

The virtual expert talk aimed at:

- Contributing to an improvement of the science-policy interface as well as cross-policy cooperation, so that scientific knowledge on the intersection between climate change and health can be picked up in the field and experience from the public health and climate policy sector can report open questions back to science.
- Raising awareness about issues related to the intersection between climate change and health, which may be different in the UK and Austria, in order to enable a **valuable exchange of experiences** as well as insights.

This report contains a short presentation of our speakers (page 1), key messages of the welcome address by British Ambassador to Austria Robert Leigh Turner (page 2), key messages of the scientific impulse talks (page 2-6), photo documentation of the event (page 7), further information and links provided by our speakers (page 8) as well as by our participants (page 9).

2) Speakers



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Jessica Beagley currently leads policy engagement initiatives of the Lancet Countdown on Health and Climate Change. With a background in public health and environmental determinants, she has worked in global health and sustainability for the past eight years, including as Policy Research manager at NCD Alliance and with the International Diabetes Federation on health education and epidemiology programmes. Jessica has a degree in physiology from the University of Oxford.

Willi Haas is a Senior Scientist and Lecturer at the Institute of Social Ecology, University of Natural Resources and Life Sciences, Vienna. He investigates society-nature interactions across time and space, the transition to a postfossil society and material flows in the circular economy. He also works on the transition to sustainable hospitals, on heat-induced impacts on health, on health co-benefits of climate change and the carbon footprint of the Austrian health sector. He was co-chair and project leader of the APCC Special Report on Health, Demography and Climate Change.





3) Welcome address and scientific impulse talks - Key messages

The sections below sum up the main messages of the welcoming speech and the scientific impulse talks following the guiding questions of the expert talk. The protocol does not display the speeches and the discussion in full but highlights some key messages:

Welcome address by British Ambassador to Austria Robert Leigh Turner

- All countries are struggling with covid-19 pandemic, recovering from it must be based on a fairer, greener and more resilient global economy ("**build back better**").
- Poorer countries are suffering more from the impacts of the covid-19 crisis and climate crisis, therefore **international solidarity and support** is required.
- Delivering on the Paris Agreement as well as the Sustainable Development Goals cannot be achieved by individual countries, thus **international cooperation** is essential.
- UK and Italy are nominated to **host COP 26**, which will take place **in Glasgow in 2021** with a focus on an **"all society approach**" as climate change affects everybody (both personally and professionally).
- COP 26 will be a key moment for building strong foundations and shape the approach of the world on fighting climate change. The UK will do everything they can to **raise political ambition** and translate political goals into action.
- What has the UK done to demonstrate climate ambition and lead by example? (1) Frist G7 country to adopt a legally binding carbon neutrality target for 2050 (2) Ground breaking 2008 UK Climate Change Act set the world's first legally binding long-term emission reduction target (3) Amongst world leaders in green growth and decarbonisation (economy grew by 72% while emissions were reduced by 42% between 1990-2017) (4) Committed to quickly phase out coal (by 2024 fossil power generation shall be phased out) (5) Strong investments in renewable energies e.g. on-shore wind farms
- By hosting this virtual Expert Talk, we hope to further our **thinking on science-based policies** and **working together across departments**. By bringing together people from various backgrounds, we can learn from each other, to ensure a more resilient future.

Scientific impulse talks - Question 1:

What are the highest climate change risks for personal and public health? How can we increase resilience in our countries?

Willi Haas:

Heat:

- In Austria, extreme heat events are currently the highest risks for personal and public health due to climate change they occur in longer periods and higher frequencies. We can already witness this development.
- In the future it is possible to have years with heat waves lasting up to 3 months (with more than 30 °C) in Austria citizens in Austria are not adjusted to this challenge.
- What makes heat waves even more challenging is our ageing society, increases in chronic diseases and already existing health inequalities these factors are reinforcing the challenges we face based on climate change.





- Why do we talk about heat events? They are most foreseeable and we have great certainty about what will happen (can be predicted with models).

Events with high uncertainty but high damage:

In comparison to heat events, there are other challenges which are not foreseeable, so-called fat tales: events that are not very probable but when they occur they lead to big damages (for instance covid-19 crisis). There is no model that can predict such incidents – high uncertainty.

Allergies/Pollen:

- Another risk for personal health is the issue of **allergies/pollen**, this issue is building up as climate change contributes to a wider spreading of plants causing allergenic reactions. Health effects will increase since more and more people become sensitised to allergens.

Call to action:

- We **need to speed up initiatives and measures regarding adaptation** (e.g. greening buildings etc.) **but also mitigation** - our current pace is not appropriate in order to face the climate crisis. It is important to face the reality: we are not on track towards zero emissions.

Jessica Beagley:

Heat:

- The effect of heat depends on the exposure and also on the vulnerability of the population.
 The UK does not experience such high exposure to heatwaves as many other countries, however it has one of the highest vulnerabilities due to a high level of urbanisation, prevalence of chronic conditions and its aging population. The number of heat related deaths is expected to rise from 2,000 to 7,000 each year by the 2050s.
- In response to this **England has had a heatwave plan since 2004.** The latest version includes measures such as requirements for care homes to create cool rooms or more stringent building regulations to ensure better protection from outdoor temperatures.

Air pollution:

- The Royal College of Physicians estimates **40,000 air pollution-related deaths per year** in the UK. Lancet Countdown estimates that health impacts of air pollution cost the UK over £8 million in 2016.
- There are also positive developments in the UK: the Clean Air Strategy was published in 2019 and sets out legally binding targets for emissions of 5 key pollutants by 2020 and 2030, additionally Britain used no coal for electricity production for more than 5 months last year UK is on track for coal phase out by 2024, ahead of schedule.

Floods:

- Floods are another big issue (especially in the winter 2013/2014), aside from the **economic impacts** this also has severe **mental health implications** (higher risks of depression, anxiety and stress disorder in the group affected by flooding).
- **Call to action:** Crucial to improve **flood protection and also mental health services**, in particular in less affluent neighborhoods.





Food security:

- The UK imports one fifth of the fresh food from countries that are severely hit by climate change (e.g. India, South Africa, Belize, Brazil) the number of countries with similar problems will grow.
- In the UK more frequent extreme temperature and changes to rainfall patterns will lead to **negative impacts on crop production**. Additionally, crops may be affected by **water shortages** following heatwaves.
- **Call to action:** More **resilient crops/different agricultural practices** are needed. Important to consider the **food sector as a part of the solution** to mitigating climate change (National Farmers Union has set a target of reaching net zero by 2040).

Scientific impulse talks - Question 2:

How can we increase cooperation and synergies between the areas of public health and climate change? Where can we identify overlaps and common interests?

Jessica Beagley:

- Transport as an example of how to raise awareness for the topic of co-benefit interventions: the Lancet Countdown estimates that almost 3000 UK deaths occur every year because of pollution from land transport, morbidity due to physical inactivity costs businesses and wider society £7.4 billion per year.
- Survey by the Department of Transport showed that 40% of 2,800 people stated that they are **walking and cycling more during the covid-19 pandemic** and most of them intend to continue doing so after the pandemic. This can be used as an **opportunity for a mind shift**.
- Multi-sectoral cooperation is critical: e.g. including health related priorities in 2020 pledges to the Paris Agreement (first time that the UK will be submitting a standalone nationally determined contributions (NDCs) rather that together with EU) or including public health professionals throughout COP26 processes. Vice versa the health sector also needs to respond to the climate issue e.g. the National Health Service has pledged to achieve net zero by 2040 for all emissions under its direct control.
- **Local governance structures**: A coalition of environmental organisations called Greener Birmingham consulted the city's residents on local environmental issues that matter most to them. One of the key findings was that **26% want a greener city because of health benefits**.

Willi Haas:

- Synergies between climate and health: **concept of health promotion** is an important entry point, it is coming from public health and aiming at integrating health in all policies.
- In Austria obesity is twice as high as it was in the 1970s due to changes in nutrition and lack of exercise in daily life, therefore it is important to increase daily exercise especially for young people. Particularly in urban areas active mobility needs to become a more dominate mode of mobility replacing motorised individual mobility to reduce air pollution. Research findings: 60 premature deaths per 100,000 inhabitants could be avoided on a yearly basis by promoting active mobility in urban areas.
- Call to action: important to have decisive measures to make active mobility more attractive (e.g. nice biking lanes and walking areas). We need a different way of organising our





transport, town planning has improved a lot in recent years, however, changes are much easier in city extension areas than already existing urban structures.

- Nutrition: as another area of potential synergies between health and climate change, meat consumption is quite high in Austria and there are very few measures addressing this. Huge learning steps are needed on how to reduce meat consumption to more healthy levels and on how to address this issue constantly in the wider public without provoking defensive attitudes.
- An approach is to alter the **food environment**: what kind of food do I find in my immediate environment? What food is served at schools? Is healthy food an easy option? Is unhealthy food a more complicated option?
- Issue of meaning/culture: what meaning is attached to eating meat or vegetarian food? We need role models to promote healthy food in daily life, it must be seen as *cool* to eat less meat. Up to now this issue has not been communicated as an issue of both climate change and health and is often left to isolated action in niches like school buffets.

Scientific impulse talks - Question 3:

What can climate and public health policy learn from the Covid-19 pandemic?

Jessica Beagley:

- Climate, health and economic objectives are **mutually reinforcing and mutually dependent**. We can't have *health* when we have poverty or extreme climate change.
- Covid-19 pandemic has shown the extent to which a large-scale health threat can jeopardise even the strongest economies and entirely redefine ways of life. We must minimise future health risks to avoid a repeat of this (related to infectious disease or warming of climate).
- **Call to action**: Climate change requires responses from all sectors of society and reorientation of the whole system. We need to act on science and invest early, because **prevention is far better** than a response after the event (also related to costs).
- Response to the covid-19 pandemic showed that **changes are possible** e.g. home working, reduced individual transport, reduced international transport we can build on these experiences.
- Challenge: **positive impacts** of climate interventions and most health interventions **are often not observed within a political term.**

Willi Haas:

- Climate mitigation issues got stuck in the debate many times because decision makers do not dare to restrict business and interfere in individual choices – this holds back climate mitigation measures.
- The covid-19 pandemic legitimised far reaching measures on the grounds of health effects, thus we need to frame the climate issue as a health issue.
- During the covid-19 pandemic regular media updates are communicating on what **people have to do and what they can do** to protect themselves as well as public health as a whole, this is very important to avoid a feeling of **powerlessness and to improve self-efficacy.** All this can be seen as the largest effort so far to increase **health literacy** for a specific issue.





- Based on a sound information of the nature of the problem and improved self-efficacy **governments are far more legitimised** to set measures.
- **Call to action:** based on the covid-19 experience it is important to make **climate change a permanent issue on the news** as well, instead of separate reporting triggered by singular events (e.g. having a permanent look on our emissions). People need to know what they can do themselves – healthy nutrition, active mobility, low carbon housing are important issues.
- Challenge: attention needs to be put on addressing **different interest groups**, as for different groups different hurdles need to be dealt with. Again, good knowledge of the problem and high self-efficacy (climate related health literacy) is essential to legitimise far reaching measures, as there will be a reorganisation of many areas and there will be **new winners and losers** of the new situation.

Scientific impulse talks - Question 4:

How can we bring green recovery plans and just transition to life?

Willi Haas:

- Policy integration: There is a high potential for higher effectivity in not discussing issues in silos, e.g. health policies need to address climate issues and vice versa. The national energy and climate plan needs to integrate health issues and the health reform needs to be one that mitigates the health sector's GHG emissions. This can be done without compromising health in parts the opposite is the case since health promotion and prevention have high so far unexploited potentials.
- Involve other groups in policy making than before, e.g. we need to get youth in on many issues as well as science. Austria has a strong climate research community, but there is no direct long-term interaction between science and politics. Science often relies on open letters because they are not involved in the process of policy making.
- **Call to action:** we should not use public money to put the economy back where it was before the covid-19 crisis, but we need to **pave the way for a sustainable and fair future.**

Jessica Beagley:

- Important to submit NDCs which complement **sustainable covid-19 recovery plans**, with both balancing long-term health, climate and economic objectives.
- Working towards green recovery plans needs to accelerate and **green key principles** must be integrated into recovery funds.
- **Call to action**: consider opportunity to accelerate progress towards net zero across sectors, **no one will be left untouched** by the health impacts of climate change, no sector is exempt from adapting and evolving.
- Community participation is crucial: e.g. UK Climate Assembly brought together more than 100 people of all shades of opinions to discuss how the UK should meet its emission targets. Include citizens to increase diversity in the discussion, key principles must resonate with a broad spectrum of society.
- Consider **health framing** as a way to communicate the personal implications of climate change for everyone.





4) Photo Documentation

Photo 1: welcome address by British Ambassador to Austria Robert Leigh Turner



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Photo 2: Elisabeth Worliczek (CCCA) introduces the speakers Jessica Beagley (Lancet Countdown) and Willi Haas (University of Natural Resources and Life Sciences, Vienna)



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5) Further information and links provided by our speakers

Jessica Beagley:

- 2019 Report of the Lancet Countdown: <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)32596-6/fulltext</u>
- Lancet Countdown Data Visualisations: <u>https://www.lancetcountdown.org/data-platform/</u>
- National Health Service Publication on Delivering Net Zero: <u>https://www.england.nhs.uk/greenernhs/wp-</u> <u>content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf</u>
- Public Health England. PHE heatwave mortality monitoring, 2019:
 <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/841320/P</u>
 <u>HE heatwave report_2019.pdf</u>
- House of Commons Environmental Audit Committee. Heatwaves: adapting to climate change, 2018: <u>https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/826/826.pdf</u>
- Public Health England, Heatwave Plan for England, 2018: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/888668/</u> <u>Heatwave_plan_for_England_2020.pdf</u>
- Royal College of Physicians, "Every breath we take: the lifelong impact o fair pollution. Report of a working party". RCP, 2016: <u>https://www.rcpjournals.org/content/clinmedicine/17/1/8</u>
- UK Government, Clean Air Strategy, 2019: <u>https://www.gov.uk/government/publications/clean-air-strategy-</u>2019
- UK Government, Government launches world-leading plan to tackle air pollution, 2019: <u>https://www.gov.uk/government/news/government-launches-world-leading-plan-to-tackle-air-pollution</u>
- Department for Environment, Food & Rural Affairs, Air quality factsheet (part 4), updated 2020: <u>https://www.gov.uk/government/publications/environment-bill-2020/10-march-2020-air-quality-factsheet-part-4</u>
- UK Government, End of Coal Power to be Brought Forward in drive towards Net Zero, 2020: <u>https://www.gov.uk/government/news/end-of-coal-power-to-be-brought-forward-in-drive-towards-net-</u> <u>zero#:~:text=The%20deadline%20for%20the%20phase,a%20speech%20to%20launch%20COP26%20.&text=La</u> <u>st%20year%20more%20than%20half,came%20from%20low%2Dcarbon%20sources</u>.
- Public Health England. The English National Study for Flooding and Health: First year report. Briefing for policy makers and practitioners, 2017:
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/597846/ NSFH_briefing_for_policymakers_and_practitioners.pdf
- Oxfam, England's most deprived areas three times more likely to have been flooded than most well-off, 2014: https://oxfamapps.org/media/press_release/2014-03-englands-most-deprived-areas/
- Committee on Climate Change, Land-use: Reducing emissions and preparing for climate change, 2018: <u>https://www.theccc.org.uk/wp-content/uploads/2018/11/Land-use-Reducing-emissions-and-preparing-for-climate-change-CCC-2018.pdf</u>
- Parliamentary Office of Science and Technology, Climate Change and Agriculture, POSTnote600, 2019: https://post.parliament.uk/research-briefings/post-pn-0600/
- Public Health England. Everybody active, every day: An evidence-based approach to physical activity, 2014: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/353384/E</u> <u>verybody_Active_Every_Day_evidence_based_approach_CONSULTATION_VERSION.pdf</u>
- Department of Transport. National Travel Attitudes Study: Wave 4 (provisional): https://www.gov.uk/government/statistics/national-travel-attitudes-study-wave-4-provisional





Birmingham City Council, Route to Zero Interim Report, 2020:
 https://birmingham.cmis.uk.com/Birmingham/Document.ashx?czJKcaeAi5tUFL1DTL2UE4zNRBcoShgo=k5kTAQ
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 D&WGewmoAfeNQ16B2MHuCpMRKZMwaG1PaO=ctNJFf55vVA%3D

Willi Haas:

- APCC Special Report on Health, Demography and Climate Change: <u>https://austriaca.at/?arp=0x003ab228</u>
- Carbon emission trends and sustainability options in Austrian health care: <u>https://www.researchgate.net/publication/341253655 Carbon emission trends and sustainability options i</u> <u>n Austrian health care</u>
- Evaluating Health Co-Benefits of Climate Change Mitigation in Urban Mobility: <u>https://www.researchgate.net/publication/324836477 Evaluating Health Co-</u> Benefits of Climate Change Mitigation in Urban Mobility
- Health Through Socioecological Lenses A Case for Sustainable Hospitals: <u>https://www.researchgate.net/publication/304816400_Health_Through_Socioecological_Lenses-</u> <u>A Case for Sustainable_Hospitals</u>
- Human Health: https://www.researchgate.net/publication/296003019 Human Health
- Sustainable Hospitals: A Socio-Ecological Approach: <u>https://www.researchgate.net/publication/233505554_Sustainable_Hospitals_A_Socio-Ecological_Approach_</u>

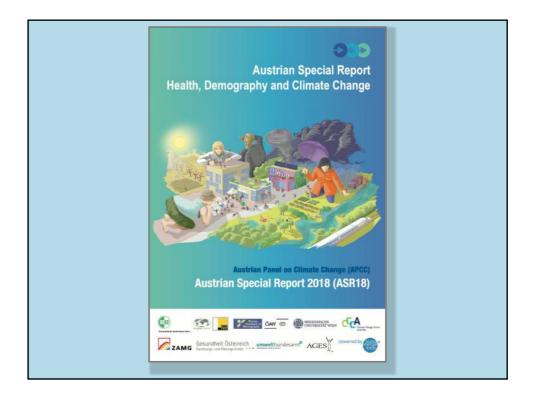
6) Further information and links provided by our participants

- McKinsey Global Institute Prioritizing health: A prescription for prosperity
 <u>https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/prioritizing-health-a-prescription-for-prosperity

 </u>
- Austrian Health Targets: <u>https://gesundheitsziele-oesterreich.at/english-summary/</u>
- SHEFS research programme (Sustainable & Healthy Food Systems: <u>https://shefsglobal.lshtm.ac.uk/</u>; <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/320455/s</u> <u>enior-research-fellows-details-areas-expertise.pdf</u>

Thank you for your active participation. We hope that you all received new input and that you can make use of this knowledge in your own professional context.





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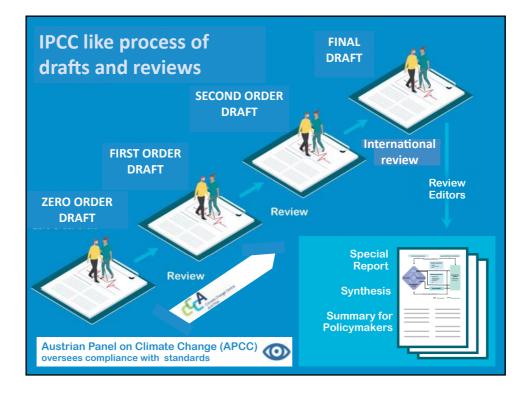
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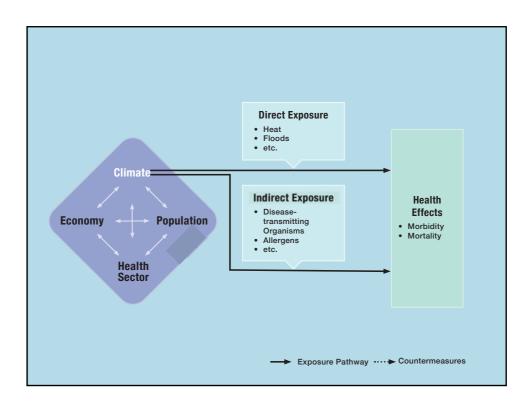
Austrian Panel on Climate Change: Helmut Haberl, Sabine Fuss, Martina Schuster, Sonja Spiegel, Rainer Sauerborn

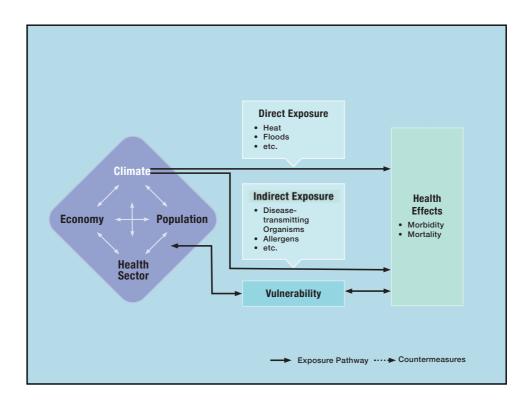
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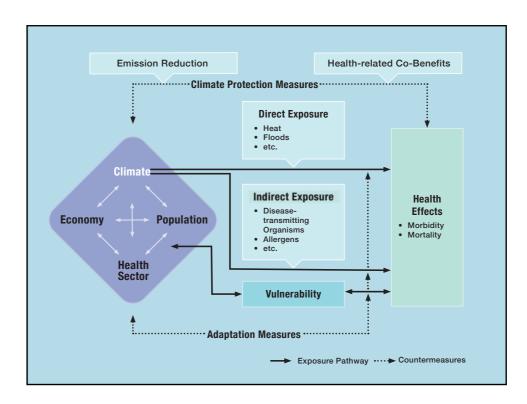
Institutions

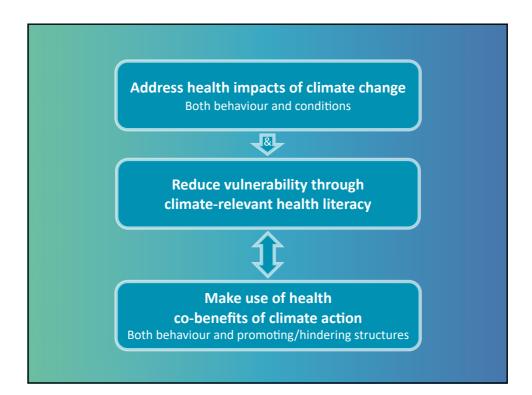
Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (D), Climate Change Centre Austria (CCCA), Gesundheit Österreich GmbH, Helmholtz Zentrum für Umweltforschung, Medizinische Universität Wien, Österreichische Agentur für Gesundheit und Ernährungssicherheit, Österreichische Akademie der Wissenschaften, Potsdam-Institut für Klimafolgenforschung, Statistik Austria, Technische Universität Graz, Umweltbundesamt GmbH, Universität Augsburg, Universität für Bodenkultur Wien, Universität Wien, University of Nottingham, Wegener Center für Klima und Globalen Wandel der Universität Graz, Wirtschaftsuniversität Wien, Wittgenstein Centre for Demography and Global Human Capital, World Health Organization und Zentralanstalt für Meteorologie und Geodynamik.











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	3	Heat	Steady increase and more, longer, hotter heat waves, less pronounced drop in overnight temperature	3	3	++	+++ 3	2	2
	2	Pollen	Extended seasons and more allergenic neobiota	2	2	+	+ 2	1	1
	2	Air pollutants	Climate-induced increased effect of ozone, decrease in particulate matter	1	2	+	++ 2	1	2
	2	Heavy precipitation	More frequent and intense	2	1,5	+	+ 2	1	2
	2	Drought	Water and food shortage	3	1	++	++ 2	1	2
	2	Flood events	More frequent and intense	1	1,5	+	+ 2	2	2
	2	Mass movements	Mudslides and landslides	2	1	+	+ 2	1	2
	1	Increased use of pesticides	Due to increased occurrence of vermin	2	2	+	+ 1	1	3
	1	Mosquitoes	Malaria	2	1	+	+ 2	1	2
	1	Thunderstorms	Increased and fiercer	2	1	+	+ 2	1	1
	1	Ticks	Surge in ESME/TBE, Lyme disease	1	1		+ 2	2	2
	1	Snow masses	Increasing events	1	1		+ 2	1	1
	1	Storms	Increased and stronger whirlwinds and tornadoes	1	1	+	+ 2	1	1
	1	Rodents	Leptospirosis, HIFRS, tularemia	1	1		+ 2	1	1
	1	Pathogens Food	Campylobacter, salmonella, E. coli & vibrio infections, mycotoxins	1	1	+	+ 1	2	2
	1	Pathogens Water	Giardia lamblia, E. coli, vibrio and cryptosporidium infections	1	1		1	1	2
	1	Fog-prone areas	Risk of accidents	1	1		1	1	1
	1	Crop failures	Food shortages	1	1	+	+ 1	1	2
	1	Water shortages	Less accumulation of ground water	1	1	++	+ 0	0	2
	0	loy traffic areas	Risk of accidents	0	0		+ 1	2	1
	0	Cold	Frostbite, strain on the immune system	-1	-1	++	+ 2	2	2

