Climate Change meets Occupational Safety and Health

Summary

Climate change and its various effects are a challenge for the international community. This also affects the world of work. Climate change leads to growing exposure to heat and solar UV radiation, especially when working outdoors. The number of non-native insects and other vectors transmitting infectious diseases is likely to increase. The same applies to the appearance of new allergens and toxins. This and efforts towards decarbonization result into new risks and hazards for workers requiring adequate means and protective measures to ensure safe and healthy work. It is obvious that climate change is a global challenge and therefore requires a joint international collaboration and networking.

The Federal Institute for Occupational Safety and Health (BAuA) and the Institutes of the German Social Accident Insurance (DGUV) invited international experts from the G7 countries to a networking event on October 17 in Dresden, Germany. The German Federal Ministry of Labour and Social Affairs (BMAS) initiated and supported this event in the context of the German G7 presidency in the Employment Track. More than 100 experts from G7 countries, the EU and further interested countries attended the event. The participants discussed various mechanisms through which climate change will affect our working life, including heat, solar UV-exposure, extreme weather events, spread of emerging diseases and allergies, new hazardous substances, challenges in alternative energy production and a circular economy, and psychological effects of climate change on the world of work.

The different symposia of the event addressed four topics of main interest:

- Heat, solar UV radiation, extreme weather
- Spread of infectious and allergic diseases
- Decarbonization, circular economy, alternative energy
- Psychological effect of climate change: Impacts and strategies

A subsequent workshop about regulatory aspects for occupational safety and health (OSH) in times of changing climate conditions followed the event on October 18. During this workshop, the participants shared information about the different regulatory OSH approaches of their countries. Furthermore, they discussed common challenges, existing solutions and first ideas for future joint initiatives and co-operations.

The results of the meeting showed a clear commitment to continue this international activity in the future and to link the OSH institutions more closely. There was consensus that many common challenges and approaches were more effectively and efficiently faced jointly and together, by co-operations within the G7-community.

November 2022

DGUV

baua: Federal Institute for Occupational Safety and Health

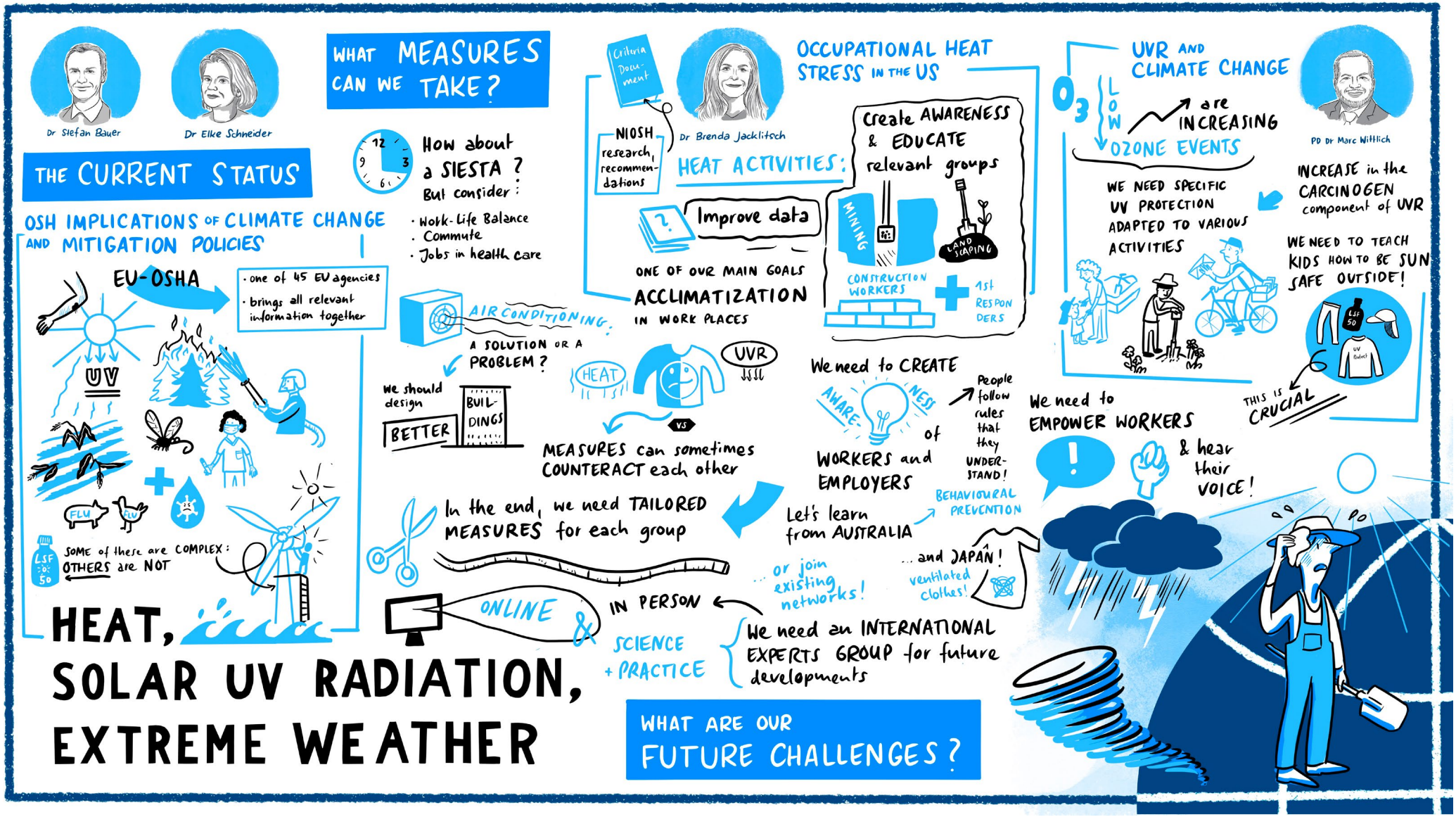
Symposium 1: Heat, solar UV radiation, extreme weather

Climate change increases the heat exposure of all workers and outdoor workers' exposure to solar UV radiation in different ways. In particular, longer periods of severe heat and/or an increasing amount of sunny periods lead to higher exposures. Higher temperatures may not only affect mental and physical performance and, thus, enhance stress. Moreover, dehydration and accidents are likely to appear more often. Heat also leads to extreme weather situations, requiring special measures for OSH. An overexposure to solar UV radiation results in acute skin and eye damages and injuries, whereas skin cancers and cataracts are more likely to be the consequences of long-term exposures.

At first, the symposium referred to the status quo of OSH measures in the G7 countries. For this purpose, an initial presentation of the European Agency for Safety and Health at Work (EU-OSHA) provided an overview about its activities. The following two introductory speeches referred to findings in the area of solar UV radiation and occupational heat stress. They provided insights into challenges, recommendations and standards, and their practical relevance. Afterwards, participants shared information about the situation in their countries and lessons learned about applicability of these measures from practice. There was a broad consensus that efforts on the international level are not sufficient at this point.

With regard to OSH measures that have to be taken in order to mitigate the consequences of climate change, participants agreed that there are many existing measures, implemented as either mandatory federal regulation or recommended standards within G7 countries that are already useful. However, these measures might also have counteractive effects. Several new approaches were discussed, including technical, organizational or personal protective measures. Measures have to be adjusted to the special need of certain industrial sectors, occupations or activities.

A major challenge for OSH is the awareness of employees. It is essential to put measures successfully into practice. This has to be emphasized and supported in the future. Such prevention concepts have to be holistic and consider occupational as well as private exposures. Environmental risk factors should no longer be regarded in an isolated way, but in a broader, multifactorial view also including factors resulting from decarbonization, digitalization, and demographic change as well. The OSH measures have to be applied, in a combined way, also indicating the need for specially tailored-to-the-job solutions.


Dr Stefan Bauer
Dr Elke Schneider
WHAT MEASURES CAN WE TAKE?
THE CURRENT STATUS
How about a SIESTA ?
But consider :
· Work-Life Balance
· Commute
· Jobs in health care
OSH IMPLICATIONS OF CLIMATE CHANGE AND MITIGATION POLICIES
EU-OSHA
· one of 45 EU agencies
· brings all relevant information together
UV
FLU
FLU
LSF 30 50
SOME of these are COMPLEX :
OTHERS are NOT
AIR CONDITIONING:
A SOLUTION OR A PROBLEM ?
We should design BETTER BUILDINGS
HEAT
UVR
vs
MEASURES can sometimes COUNTERACT each other
In the end, we need TAILORED MEASURES for each group
ONLINE &
IN PERSON
SCIENCE + PRACTICE
We need an INTERNATIONAL EXPERTS GROUP for future developments
HEAT, SOLAR UV RADIATION, EXTREME WEATHER
WHAT ARE OUR FUTURE CHALLENGES ?
Criteria Document
NIOSH research, recommendations
Dr Brenda Jacklitsch
OCCUPATIONAL HEAT STRESS IN THE US
HEAT ACTIVITIES:
Improve data
ONE OF OUR MAIN GOALS
ACCLIMATIZATION IN WORK PLACES
Create AWARENESS & EDUCATE relevant groups
MINING
LAND SHAPING
CONSTRUCTION WORKERS
1st RESPONDERS
We need to CREATE AWARENESS of WORKERS and EMPLOYERS
People follow rules that they UNDERSTAND!
Let's learn from AUSTRALIA
BEHAVIOURAL PREVENTION
... and JAPAN!
ventilated clothes!
... or join existing networks!
O3 LOW OZONE EVENTS are INCREASING
UVR AND CLIMATE CHANGE
PD Dr Marc Wittlich
WE NEED SPECIFIC UV PROTECTION ADAPTED TO VARIOUS ACTIVITIES
INCREASE in the CARCINOGEN component of UVR
WE NEED TO TEACH KIDS HOW TO BE SUN SAFE OUTSIDE!
LSF 50
UV (blue)
THIS IS CRUCIAL
We need to EMPOWER WORKERS
& hear their VOICE!

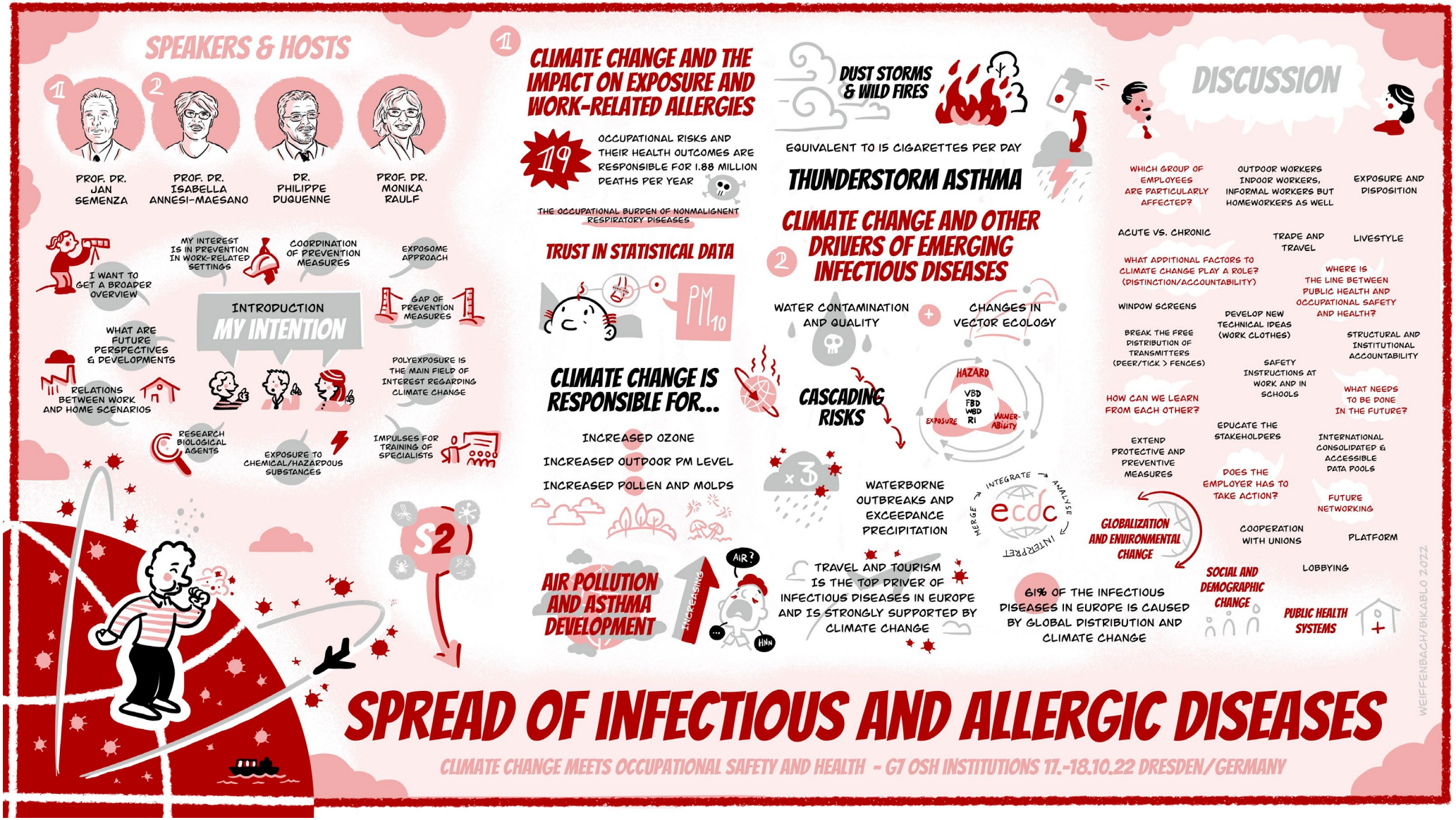
Symposium 2: Spread of infectious and allergic diseases

Climate change is likely to have significant impacts on ecosystems and the organisms they contain, particularly through changes in precipitation and rising temperatures. In principle, it is assumed that global warming, in conjunction with globalization, will lead to expanded distribution areas of many species in previously colder regions. Alongside, it is expected that infectious and allergic diseases caused by emerging pathogens or allergens may occur more frequently in areas where they are currently not or rarely observed.

A first introductory presentation referred to exposure and work-related allergies. Allergies are complex diseases characterized by multilevel interactions between individual susceptibility and exposure to environmental factors. Indoor and outdoor work-related exposures can make another important contribution. The management of climate-related occupational allergies requires multidisciplinary approaches. It should consider preventive health strategies, environmental, public and occupational interventions, and the development, implementation, evaluation and improvement of guidelines to protect workers' health. The topics of the following presentation were infectious diseases. It was presented that infectious disease threat events are related to underlying, sometimes multiple, drivers. These drivers can be disentangled and analyzed. Subsequently, these drivers can be classified and ranked for public health actions. Monitoring and surveillance of such drivers can facilitate anticipation and mitigation of the impact of infectious disease threat events, both, in public health and OSH.

The following discussion showed that outdoor workers are particularly vulnerable to infectious diseases and allergies. Existing protective measures (following the TOP ranking of technological, organizational and personal protective measures) should be implemented and disseminated in several languages to increase awareness. Current research gaps show that it requires multidisciplinary approaches and work to collect data and build up a database as a common platform. This requires standardization and harmonization of data for globally collected data. It is also essential to create public awareness of possible hazards at an early stage. Finally, useful diagnostic tools have to be developed and made available.

For a successful collaboration, it is essential that not only experts from different countries have to be involved, but also experts with a multidisciplinary background. This includes researchers, employers, employees, unions, authorities and political decision makers, accident insurances, medical and OSH experts. Climate change, even in the area of OSH, has to be safely anchored in the consciousness of all those concerned in order to conduct research to supplement knowledge, collect valuable data and harmonize, develop and adapt appropriate prevention strategies, adjust policies and regulations and to exchange on practices, training and information.


SPEAKERS & HOSTS
1
2
PROF. DR. JAN SEMENZA
PROF. DR. ISABELLA ANNESI-MAESANO
DR. PHILIPPE DUQUENNE
PROF. DR. MONIKA RAULF
I WANT TO GET A BROADER OVERVIEW
MY INTEREST IS IN PREVENTION IN WORK-RELATED SETTINGS
COORDINATION OF PREVENTION MEASURES
EXPOSOME APPROACH
INTRODUCTION
MY INTENTION
GAP OF PREVENTION MEASURES
WHAT ARE FUTURE PERSPECTIVES & DEVELOPMENTS
RELATIONS BETWEEN WORK AND HOME SCENARIOS
POLYEXPOSURE IS THE MAIN FIELD OF INTEREST REGARDING CLIMATE CHANGE
RESEARCH BIOLOGICAL AGENTS
EXPOSURE TO CHEMICAL/HAZARDOUS SUBSTANCES
IMPULSES FOR TRAINING OF SPECIALISTS
S2
1
CLIMATE CHANGE AND THE IMPACT ON EXPOSURE AND WORK-RELATED ALLERGIES
19
OCCUPATIONAL RISKS AND THEIR HEALTH OUTCOMES ARE RESPONSIBLE FOR 1.88 MILLION DEATHS PER YEAR
THE OCCUPATIONAL BURDEN OF NONMALIGNENT RESPIRATORY DISEASES
TRUST IN STATISTICAL DATA
PM10
CLIMATE CHANGE IS RESPONSIBLE FOR...
INCREASED OZONE
INCREASED OUTDOOR PM LEVEL
INCREASED POLLEN AND MOLDS
AIR POLLUTION AND ASTHMA DEVELOPMENT
INCREASING
AIR?
HNN
DUST STORMS & WILD FIRES
EQUIVALENT TO 15 CIGARETTES PER DAY
THUNDERSTORM ASTHMA
2
CLIMATE CHANGE AND OTHER DRIVERS OF EMERGING INFECTIOUS DISEASES
WATER CONTAMINATION AND QUALITY
+
CHANGES IN VECTOR ECOLOGY
CASCADING RISKS
HAZARD
VBD
FBD
WBD
RI
EXPOSURE
VULNER-ABILITY
x3
WATERBORNE OUTBREAKS AND EXCEEDANCE PRECIPITATION
INTEGRATE
ANALYSE
INTERPRET
MERGE
ecdc
TRAVEL AND TOURISM IS THE TOP DRIVER OF INFECTIOUS DISEASES IN EUROPE AND IS STRONGLY SUPPORTED BY CLIMATE CHANGE
61% OF THE INFECTIOUS DISEASES IN EUROPE IS CAUSED BY GLOBAL DISTRIBUTION AND CLIMATE CHANGE
DISCUSSION
WHICH GROUP OF EMPLOYEES ARE PARTICULARLY AFFECTED?
OUTDOOR WORKERS INDOOR WORKERS, INFORMAL WORKERS BUT HOMEWORKERS AS WELL
EXPOSURE AND DISPOSITION
ACUTE VS. CHRONIC
TRADE AND TRAVEL
LIVESTYLE
WHAT ADDITIONAL FACTORS TO CLIMATE CHANGE PLAY A ROLE? (DISTINCTION/ACCOUNTABILITY)
WHERE IS THE LINE BETWEEN PUBLIC HEALTH AND OCCUPATIONAL SAFETY AND HEALTH?
WINDOW SCREENS
DEVELOP NEW TECHNICAL IDEAS (WORK CLOTHES)
BREAK THE FREE DISTRIBUTION OF TRANSMITTERS (PEER/TICK > FENCES)
STRUCTURAL AND INSTITUTIONAL ACCOUNTABILITY
SAFETY INSTRUCTIONS AT WORK AND IN SCHOOLS
HOW CAN WE LEARN FROM EACH OTHER?
WHAT NEEDS TO BE DONE IN THE FUTURE?
EDUCATE THE STAKEHOLDERS
EXTEND PROTECTIVE AND PREVENTIVE MEASURES
INTERNATIONAL CONSOLIDATED & ACCESSIBLE DATA POOLS
DOES THE EMPLOYER HAS TO TAKE ACTION?
FUTURE NETWORKING
GLOBALIZATION AND ENVIRONMENTAL CHANGE
COOPERATION WITH UNIONS
PLATFORM
LOBBYING
SOCIAL AND DEMOGRAPHIC CHANGE
PUBLIC HEALTH SYSTEMS
WEIFFENBACH/BIKABLO 2022
SPREAD OF INFECTIOUS AND ALLERGIC DISEASES
CLIMATE CHANGE MEETS OCCUPATIONAL SAFETY AND HEALTH - G7 OSH INSTITUTIONS 17.-18.10.22 DRESDEN/GERMANY

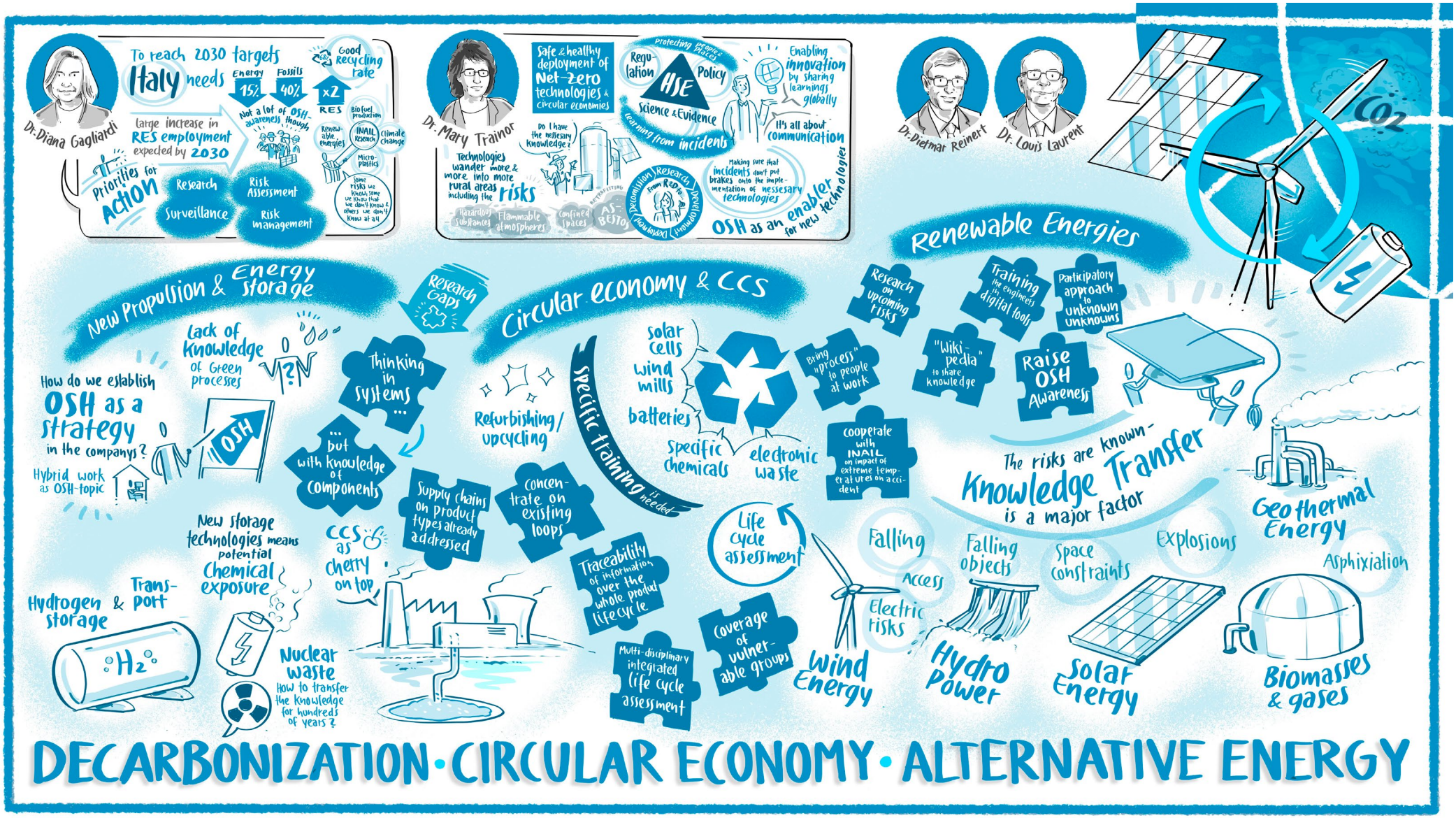
Symposium 3: Decarbonization, circular economy, alternative energy

Droughts and floods have also increased in the G7 in recent years. These are undoubtedly signs of human-made climate change. If we want to limit the effects in the long term, decarbonization is necessary. Decarbonization concerns a broad field and already has a considerable impact on safety and health at work: Renewable energies such as wind power, photovoltaic cells and biogas plants, carbon capture and storage, mobility by new propulsion technologies (batteries, hydrogen) and circular economy including a longer durability of goods.

Both introductory speeches addressed the impact of a green transition towards renewable energies and a circular economy on the safety and health of workers. The worldwide share of employment in the clean energy sector is already increasing and will further increase by 2030 due to the green transition. Most of the jobs in renewable energies are linked to solar thermal energy and photovoltaic, followed by onshore wind energy and gas network (e.g., use of hydrogen for energy distribution in the future). New technologies will lead to change in established occupations, and new occupations will emerge. New hazards will also come up with the transition to green jobs. They have to be identified, e.g., by means of risk assessment and participatory approaches, and addressed accordingly. With respect to occupations related to renewable energies, most of the hazards employees encounter are known from other sectors and preventive measures are available. However, knowledge transfer to workers in the renewable energy sector and vocational training about protective measures is still needed.

The shift towards a green economy is complex. The experts recognize this complexity itself as a hazard for OSH. They point to the necessity of applying a holistic, system-oriented approach with knowledge of the individual system's components and their interactions to identify OSH risks. With respect to intersectional hazards, special cultural or religious background of the employees should also be considered.

To meet the future challenges of decarbonization, multidisciplinary approaches are needed in which OSH is considered from the start on. OSH has to become pro-active rather than reactive and a facilitator for innovation rather than an obstacle.


Dr. Diana Gagliardi
To reach 2030 targets
Italy needs
Energy 15%
Fossils 40%
x2 RES
Good recycling rate
large increase in RES employment expected by 2030
Not a lot of OSH-awareness though
Priorities for Action
Research
Surveillance
Risk Assessment
Risk management
Biofuel production
Renewable energies
INAIL Research
Climate change
Micro-plastics
Some risks we know, some we know that we don't know & others we don't know at all
Dr. Mary Trainor
Safe & healthy deployment of Net-zero technologies & circular economies
Regulation
Policy
HSE
Science & Evidence
Learning from incidents
Enabling innovation by sharing learnings globally
It's all about communication
Making sure that incidents don't put brakes onto the implementation of nessesary technologies
Do I have the nessesary knowledge?
Technologies wander more & more into more rural areas including the risks
Hazardous substances
Flammable atmospheres
Confined spaces
AS-BESTOS
Prevention
Research
Development
OSH as an enabler for new technologies
Dr. Dietmar Reinert
Dr. Louis Laurent
CO2
Renewable Energies
New Propulsion & Energy storage
Circular economy & CCS
Research gaps
Lack of knowledge of Green processes
How do we establish OSH as a strategy in the company?
OSH
Hybrid work as OSH-topic
Thinking in systems ...
... but with knowledge of components
Refurbishing / upcycling
Specific training if needed
solar cells
wind mills
batteries
specific chemicals
electronic waste
Supply chains on product types already addressed
Concentrate on existing loops
CCS as cherry on top
Traceability of information over the whole product lifecycle
Life cycle assessment
Coverage of vulnerable groups
Multi-disciplinary integrated life cycle assessment
Research on upcoming risks
Training the engineers in digital tools
Participatory approach to unknown unknowns
"Wiki-pedia" to share knowledge
Raise OSH Awareness
Bring "process" to people at work
Cooperate with INAIL on impact of extreme temperatures on accident
The risks are known-
Knowledge Transfer
is a major factor
Geothermal Energy
Asphixiation
Explosions
Space constraints
Falling objects
Falling
Access
Electric risks
Hydrogen & storage
Trans-port
H2
New storage technologies means potential Chemical exposure
Nuclear waste
How to transfer the knowledge for hundreds of years?
Wind Energy
Hydro Power
Solar Energy
Biomasses & gases
DECARBONIZATION • CIRCULAR ECONOMY • ALTERNATIVE ENERGY

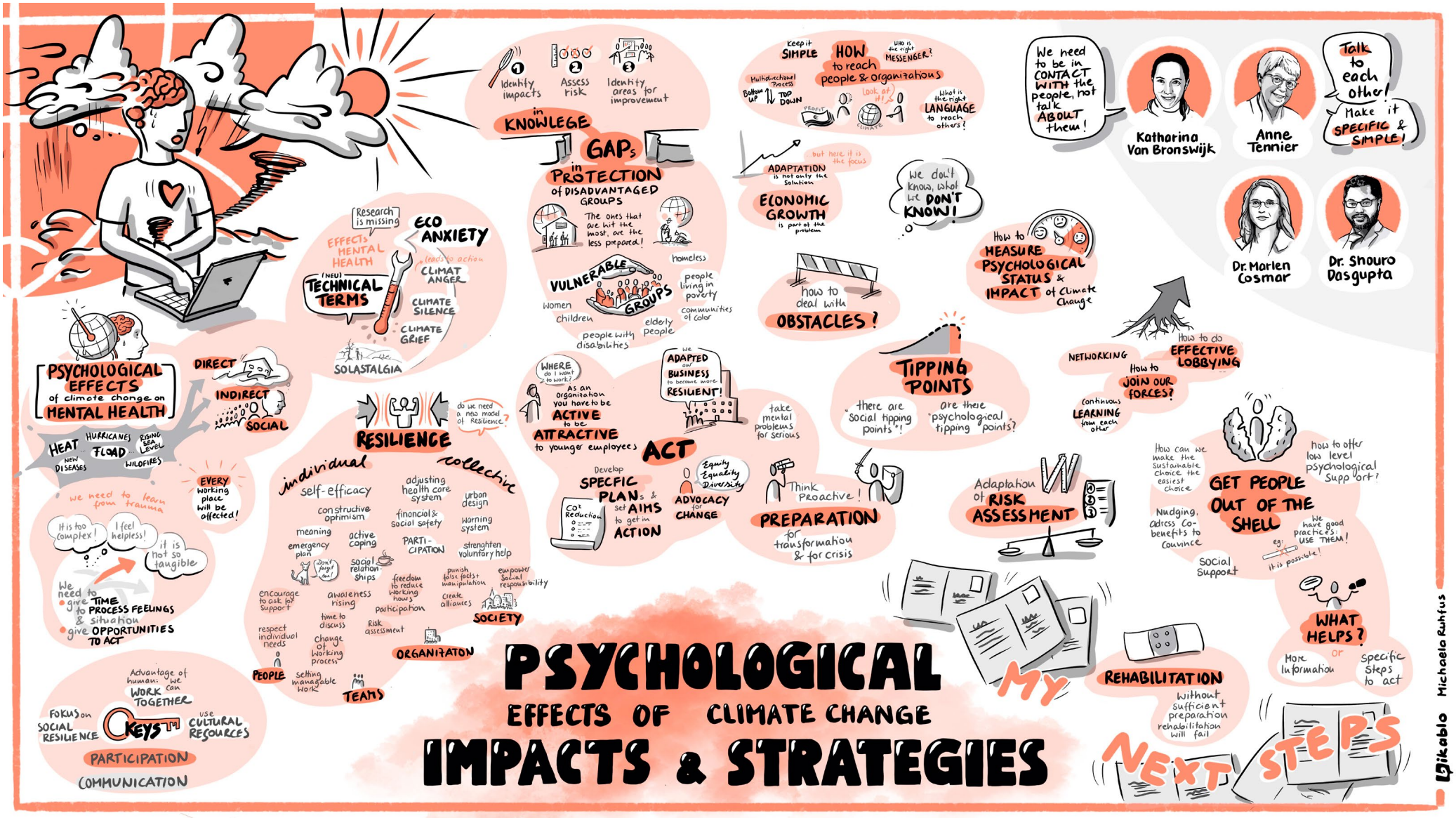
Symposium 4: Psychological effect of climate change: Impacts and strategies

Climate change affects our safety and health at the workplace – including our mental health and stress. This symposium investigated the psychological impact of climate change, potential threats, and measures of prevention. In the future, we will have to deal with new psychological phenomena caused by the climate crisis: E.g., solastalgia, climate anxiety, and eco-grief. Additionally, existing psychological issues may appear more often and/or grow in intensity, e.g., depression, burnout, PTSD, and anxiety. In the working environment, especially extended heat periods can lead to stress, sleep disorders, irritability, and lowered ability to concentrate.

The topic of the initial speech introduced a biopsychosocial model as a basis for effects on human health. It includes physical, mental, psychosocial and community effects, especially on vulnerable groups, e.g., children, elderly, people living in poverty and people with disabilities. One of the focus topics for understanding people's reactions to climate change was resilience. In this connection, it was stressed that participation and communications were crucial and people need the space for processing and the opportunity to act. The second speech explained that each workplace is or will be affected by climate change. Climate anxiety is one of the major aspects: chronic fear and stress caused by watching the irrevocable impacts of climate change, worrying about the future, feeling loss and helplessness. In general, psychological impacts are direct (e.g., PTSD caused by extreme weather event), indirect (e.g., anxiety caused by crop failures), and social (e.g., displacement, migration, inequality). It was reported that climate change and its effects are handled differently by the generations: Millennials and generation Z (born after 1981) feel a great burden while people born before 1980 feel less stressed. Therefore, younger generations are also urging their employers to act. Disproportionate impacts of climate change might put social cohesion at risk because disadvantaged groups are likely to suffer most from it.

To strengthen the resilience of workers and businesses, it is crucial to ensure a safe and supportive work climate including prevention culture. Low-level offers of mental support, reliable emergency plans for business disruptions caused by extreme weather, and the adaptation of existing tools like risk assessment and corporate management for safety and health to the current situation are important pieces of the puzzle.

The main research gaps identified were manifold. At first, the topic requires a formal identification of psychological impacts and a projection into the future. Psychological tipping points on an individual and a societal level have to be identified. Communication is also a core topic, so suitable communication means have to be defined in order to create awareness among workers, to foster participation and involvement, and to initiate change and overcome obstacles. Finally, mechanisms for initiating change and means to accommodate to change have to be investigated. This requires an involvement in politics and legislation to bring psychological issues into politics, regulation, and business practices. International collaboration is required to build a common platform and communication base for this. On this base, information about core issues, best practices and OSH methods, e.g., risk assessment can be exchanged regionally and globally in order to face the challenges that come with climate change.


PSYCHOLOGICAL EFFECTS of climate change on MENTAL HEALTH
DIRECT
INDIRECT
SOCIAL
HEAT
HURRICANES
FLOOD
RISING SEA LEVEL
NEW DISEASES
WILDFIRES
we need to learn from trauma
It is too complex!
I feel helpless!
it is not so tangible
We need to
give TIME to PROCESS FEELINGS & situation
give OPPORTUNITIES TO ACT
EVERY working place will be affected!
Research is missing
EFFECTS MENTAL HEALTH
ECO ANXIETY
leads to action
(NEU) TECHNICAL TERMS
CLIMATE ANGER
CLIMATE SILENCE
CLIMATE GRIEF
SOLASTALGIA
Identify impacts
Assess risk
Identify areas for improvement
KNOWLEGE GAPs in PROTECTION of DISADVANTAGED GROUPS
The ones that are hit the most, are the less prepared!
VULNERABLE GROUPS
Women
children
people with disabilities
elderly people
communities of color
people living in poverty
homeless
RESILIENCE
do we need a new model of Resilience?
individual
collective
self-efficacy
constructive optimism
meaning
emergency plan
active coping
social relationships
adjusting health care system
financial & social safety
urban design
warning system
PARTICIPATION
strengthen voluntary help
freedom to reduce working hours
participation
awareness rising
encourage to ask for support
time to discuss
change of working process
respect individual needs
setting manageable work
PEOPLE
TEAMS
Risk assessment
ORGANIZATION
punish false facts + manipulation
create alliances
empower social responsibility
SOCIETY
WHERE do I want to work?
As an organization you have to be ACTIVE to be ATTRACTIVE to younger employees
We ADAPTED our BUSINESS to become more RESILIENT!
ACT
take mental problems for serious
Develop SPECFIC PLANs & set AIMS to get in ACTION
CO2 Reduction
ADVOCACY for CHANGE
Equity Equality Diversity
Think Proactive!
PREPARATION for transformation & for crisis
Keep it SIMPLE
HOW to reach people & organizations
WHO is the right MESSENGER?
Multidirectional Process
Bottom UP
TOP DOWN
Look at #1
What is the right LANGUAGE to reach others?
ADAPTATION is not only the solution
but here it is the focus
ECONOMIC GROWTH is part of the problem
we don't know, what we DON'T KNOW!
how to deal with OBSTACLES?
TIPPING POINTS
there are "social tipping points"!
are there "psychological tipping points?
How to MEASURE PSYCHOLOGICAL STATUS & IMPACT of Climate Change
NETWORKING
How to JOIN OUR FORCES?
How to do EFFECTIVE LOBBYING
continuous LEARNING from each other
We need to be in CONTACT WITH the people, not talk ABOUT them!
Katharina Van Bronswijk
Anne Tennier
Talk to each other!
Make it SPECIFIC & SIMPLE!
Dr. Marlen Cosmar
Dr. Shouro Dasgupta
Adaptation of RISK ASSESSMENT
How can we make the sustainable choice the easiest choice
Nudging, address Co-benefits to convince
GET PEOPLE OUT OF THE SHELL
How to offer low level psychological Support?
We have good practices: USE THEM!
eg:
it is possible!
Social Support
WHAT HELPS?
More Information
or
specific steps to act
REHABILITATION
without sufficient preparation rehabilitation will fail
Advantage of human: WE can WORK TOGETHER
FOKUS on SOCIAL RESILIENCE
KEYS
use CULTURAL RESOURCES
PARTICIPATION
COMMUNICATION
PSYCHOLOGICAL
EFFECTS OF CLIMATE CHANGE
IMPACTS & STRATEGIES
MY NEXT STEPS
Likable Michaela Ruhfus

Follow-up Workshop: Regulation

All participants of the subsequent workshop agreed that regulation is necessary to address new occupational risks in times of climate change. For several countries and sectors, regulation is already available. The decision, whether voluntary or mandatory regulation is required, has to be based on the type and specifics of the risk. Some participants preferred goal-setting regulation to strict specific measures, because some sectors and some proportion of the workforce may be more susceptible to the risks due to climate change than others (e.g., farming, construction, immigrant workers). It is important to explain and describe the risks and corresponding measures to facilitate acceptance of rules and regulation. The communication has to be transparent. Regulation needs to be adapted to account for a changing state of technology and knowledge. The discussion also addressed the possible interaction with other emerging issues and developing fields, such as digitization and demographics.

There was a consensus that risk assessment is a suitable tool used in many parts of the world, but it should address risks associated with climate change. In addition, common instruments for risk assessment should be employed. It is important that employers are enabled and supported performing the risk assessment. A proactive, preventive approach was considered to be advantageous. With regard to specific instruments, a tailored mixture was envisioned. With regard to transfer, videos, web sites, tabloid publication formats and social media may have benefits for increasing awareness. Knowledge as well as testimonials and accident reports are also a good way to increase awareness.

The discussion also showed that possibly conflicting goals have to be considered. An example for this is the necessity of a protection against solar UV radiation by wearing long-sleeved clothes, which may contradict to the need to wear less or light clothing to avoid the impact of heat.

The discussion arrived at the following core findings:

- Appropriate regulatory measures should be taken to address climate change. A stronger exchange on the effects of regulatory measures is very crucial.
- In addition to direct effects (e.g., heat, UV radiation, vectors for infectious diseases, extreme weather events), there are indirect effects in many areas of the working world, e.g., through changes in work processes, new substances. A practicable structure and a broad exchange of knowledge is important for the future.
- Climate change must be tackled together with demographic changes, digitization, decarbonization. Risk assessments are the most suitable instrument for deriving OSH measures.
- In some cases, simple solutions are available that should be appropriately communicated to the specific group. A stronger exchange on the effects of measures should befacilitated.
- For certain issues, there are conflicting goals between initially obvious measures at the level of individual risk factors and specialist disciplines. A stronger interdisciplinary exchange is required here.

Acknowledgements

The Federal Institute for Occupational Safety and Health (BAuA) and the Institutes of the German Social Accident Insurance (DGUV) would like to thank the German Federal Ministry of Labour and Social Affairs (BMAS) and the G7 Labour and Employment ministries for their support of this networking event.

German Social Accident Insurance (DGUV)
Glinkastraße 40
D-10117 Berlin
Germany
www.dguv.de

Federal Institute for Occupational Safety and Health (BAuA)
Friedrich-Henkel-Weg 1-25
D-44149 Dortmund
Germany
www.baua.de

Gender-neutral language is used in this publication. Where this is not possible or would detract from the readability of the text, terms used to refer to persons include all genders.

Imprint | Publisher: German Social Accident Insurance (DGUV), Glinkastraße 40, 10117 Berlin, Telephone: +49 30 13001-0, mail to: *info@dguv.de*, Internet: *www.dguv.de* & Federal Institute for Occupational Safety and Health (BAuA), Friedrich-Henkel-Weg 1-25, 44149 Dortmund, Telephone: +49 231 9071-2071, mail to: *info-zentrum@baua.bund.de*, Internet: *www.baua.de* | Design: S. Graul | Graphics S.1 Ed Hawkins/University of Reading, License: Creative Commons Licence, Graphics S.3 Judith Mall, bikablo, Graphics S.5 Tim Weiffenbach, bikablo, Graphics S.7 Tobias Wieland, bikablo Graphics S.9 Michaela Ruhfus, bikablo | DOI: 10.21934/cooperation20221219, November 2022