



Report

on the effects of climate
change in JHL's sectors

#jhlofthefuture

Aula Research Oy

12.4.2021

Contents

Preface	3
1 JHL's professional sectors face many shared changes	3
Public sector: Pioneer of climate work.....	3
Climate change is unjust: Uneven distribution of harmful effects	4
Justice and equity in times of climate change: Just transition	4
Making green agreements on employment terms and conditions: What can labour market parties do?.....	4
Inclusion: How can employees make a difference with their choices?	5
Competence: Cross-cutting competence needs in sectors as a result of climate change	5
Working conditions and well-being at work: The changing climate affects indoor and outdoor jobs	6
2 Sector-specific impacts of climate change on working life	6
Social welfare and health care sector.....	6
Catering and cleaning sector.....	7
Pedagogy and education sector.....	7
Information and administration sector	7
Technology and transport sector	8
Security sector	8

Aula Research Oy

12.4.2021

Preface

By commission of JHL, Aula Research conducted a report on how climate change affects employees represented by JHL and the trade union movement's operations. The purpose of the report is to be a tool which applies theoretic research literature concerning climate change in as concrete a way as possible to the daily life of JHL members. In addition to the literature review, expert interviews, too, provided information about the effects of climate change on employees.

The report includes several case examples which help identify the scale of the problems and develop solutions. The report examines how climate change affects working life from the point of view of JHL's six professional sectors:

- Social welfare and health care sector
- Catering and cleaning sector
- Pedagogy and education sector
- Information and administration sector
- Technology and transport sector
- Security sector

This summary examines the key effects of climate change, as raised in the literature review and expert interviews, on JHL's sectors.

1 JHL's professional sectors face many shared changes

Although the professional sectors represented by JHL are very different compared to each other, the report found many risks or pressures for change which affect several or all professional sectors simultaneously.

Public sector: Pioneer of climate work

Climate change does not affect individual people or sectors. The entire Finnish society is undergoing changes as a result of climate change. In addition, climate change is a challenging phenomenon because it is driven by people's actions, and the reasons and consequences do not go hand in hand: Climate emissions in one place may affect another place. For this reason the public sector, which constitutes the structures and rules of society, is expected to take a leadership position in curbing climate change and adjusting to it.

The aim is to reduce emissions in all public sector functions, which is how climate leadership is reflected in the daily life of JHL's employees. For example, climate impacts will be taken into account in the public procurement of goods and services, and in public construction procurement. In addition, climate actions will be taken with the help of daily choices, such as paying attention to the consumption of water, electricity and heat. In

Aula Research Oy

12.4.2021

practice, the public sector's climate work is guided by the proximity principle: Climate actions should be taken locally, close to employees and with as low bureaucracy as possible.

Climate change is unjust: Uneven distribution of harmful effects

Climate change brings about both direct (such as heat waves) and indirect harmful effects (such as diseases). Various groups of people in society do not have to suffer from the effects to the same extent. The uneven distribution of harmful effects usually has to do with people's varying abilities to prepare for the effects: For example, inadequate physical abilities (e.g. elderly people), financial possibilities (e.g. poverty) or failing social safety nets (e.g. homelessness) prevent people from preparing for climate risks. In most cases, the biggest climate risks are faced by those who are already disadvantaged. As a result, climate change may generate a spike in inequality.

In addition, climate change is both a gender and generation issue. Compared to men, women are expected to suffer more from the consequences of climate change. The result has to do with biological differences and uneven gender distribution in the sectors. In addition, today's climate emissions mean less welfare tomorrow, which is why climate change is also a generation issue.

Justice and equity in times of climate change: Just transition

Also in Finland there are sectors whose current operations are not sustainable in terms of climate. The operations of these kinds of sectors (such as the use of peat in energy production) must sooner or later be limited for climate reasons, which leads to vanishing jobs. This means that the transition towards climate sustainability in society also brings about "losers". In Finland, just transition refers especially to the fact that our social security system guarantees a basic income and possibilities for retraining to those who lose their jobs because of climate change. The principles of just transition also demand that employees and trade unions get to influence the planning of climate actions.

Making green agreements on employment terms and conditions:

What can labour market parties do?

In Finland, agreements and laws stipulate about environmental issues and the terms and conditions of employment – but separately. Making green agreements means that employees and employers would together negotiate on emission reductions and employment terms and conditions. This kind of green agreement is a win-win situation for both agreement parties, because well-being at work, increased work productivity and climate actions all support each other. It has been predicted that green agreements will become more common in the coming years, although making them will not always be easy. In practice, one can assume that climate change issues will become part of the Finnish culture of

Aula Research Oy

12.4.2021

agreement, both locally and even nationally when agreeing on the terms and conditions of employment.

The mutual trust of labour market parties becomes emphasised when making green agreements. In an ideal division of labour, employees look for shortcomings and ways of reducing emissions in their daily life and work processes, after which the employer commits themselves to fixing the observed shortcomings. The role of the state is to set a framework and to support both the employees and employers.

Inclusion: How can employees make a difference with their choices?

Employees can participate in curbing climate change, both in their workplaces and as consumers, by making climate-friendly initiatives and choices. The inclusion of employees in the climate actions of the workplace helps determine the best possible actions. Employees have information and knowledge about grass roots deficiencies in workplaces. Ideas, observations and awareness concerning, say, heating, cooling, quality of indoor air and the functionality of recycling are promoting a more climate-friendly workplace.

Employee inclusion also increases the acceptability of climate actions. Inclusion in itself is very important, even if the climate actions of a workplace were small. It increases different people's and parties' understanding of each other, also in climate-related matters. Climate change arouses various emotions in individuals. These emotions should be turned into action, participation and making an impact. Curbing climate change requires fast and significant decisions on all forums, from national decision making to a single workplace. At the same time, one has to act fast but also strengthen joint discussion and understanding, and prevent escalated views. Otherwise it will not be possible to take the actions.

Competence:

Cross-cutting competence needs in sectors as a result of climate change

Climate change creates a need for specific competence in many sectors. However, many competence needs caused by climate change are general working life or meta-skills which are not just needed in certain sectors.

From the point of view of an individual employee, a significant competence need is the ability to understand entireties and grasp the complexity of climate change. What is climate change all about? Why do we need to curb it and why is that so difficult to do? The key issue is understanding how one's own job is linked to climate change as a whole. Then it is also easier to understand and accept why there may be changes to one's job as a result of climate change or curbing it. The changing competence needs of the sectors also require that individuals have the ability and desire to acquire new information and new kinds of work methods and tools.

Climate change arouses various emotions in people. Some people are frustrated or scared by the uncertainty related to climate change; others are interested in preparing for it. Learning how to deal with the emotions arising from climate change uncertainty is a skill.

Aula Research Oy

12.4.2021

Working conditions and well-being at work:

The changing climate affects indoor and outdoor jobs

Climate change has a cross-cutting impact on both indoor and outdoor jobs. If no preparations are made for climate change, there will be negative consequences on working conditions, well-being at work and working efficiency.

The direct impacts of climate change on weather conditions, and actions related to preparing for and curbing climate change affect construction, design solutions of workplaces and indoor environments, material choices, the use of buildings and workspaces, and maintenance and repair. When it comes to indoor spaces, issues such as uncomfortable heat and problems with indoor air caused by CO₂ emissions may become more common. According to research, the changing weather conditions related to climate change have direct negative impacts on physical and mental health and the productivity of work. Climate change also has indirect effects on buildings. For example, disturbances in the distribution of electricity and water may become more common, which has an even more negative effect on well-being at work.

Outdoor workers have to deal with increasingly common extreme weather conditions and diseases mediated by plants, animals, food and water. In the Finnish climate there will be increased temperatures, more rain and humidity, a decreasing amount of snow and frost and more wind. If the work processes, clothes and equipment are not suitable for the conditions, the effects will be witnessed in well-being at work, occupational safety and working efficiency.

2 Sector-specific impacts of climate change on working life

JHL represents a variety of professional sectors, which is why many differences between the sectors were discovered in terms of how climate change affects them.

Social welfare and health care sector

Climate change will result in increased numbers of patients and clients in the social welfare and health care sector. Those in a vulnerable position will have an increased need for social aid, because climate change will affect them the most. In the health care sector on the other hand, the number of patients will increase due to, say, increasingly common heat waves, accidents, diseases and mental health disorders. If no climate actions are taken, the social welfare and health care sector employees will be more burdened due to an increased workload and decreasing working conditions. Disturbances in basic infrastructure (water, transport, energy) and wide-scale environmental migration were identified as the biggest climate risks in the social welfare and health care sectors. The social welfare and health care sectors have to invest in employees, property and equipment in order to take climate actions and prepare for climate risks.

Aula Research Oy

12.4.2021

Catering and cleaning sector

In catering sector work, the most concrete impacts of climate change are dietary changes towards more plant-based diets and reducing food waste.

There is no question that the transition towards a plant-based diet makes sense in terms of curbing climate change. This topic has been widely dealt with. The transition towards a more plant-based diet will probably also be reflected in catering sector work, because public catering services have a significant size, and national health recommendations affect the meals served by them. Preparing different kinds of food may require learning new things but also adaptation: Diet is a part of people's identity, so making changes to it requires understanding and changing attitudes.

Catering services produce 78 million kilograms of food waste annually. A significant amount of it has been available in buffet lines or has been prepared for them. Reducing food waste will probably play an even larger role in the various phases of catering sector work, especially in planning.

The effects of climate change on catering and cleaning sector employment will probably be relatively small and indirect. In the cleaning sector, climate change affects the equipment, products and materials used for cleaning. How buildings react to the changing climate has a large impact on the working conditions and well-being at work of cleaning sector employees.

Pedagogy and education sector

The pedagogy and education sectors have an extremely central and undervalued role in the work against climate change. Ultimately, pedagogy and education are the best methods for increasing climate awareness, shaping attitudes and reacting to changes in competence needs resulting from climate change. This means that the pedagogy and education sector first and foremost enables the changes that a society has to make if it wants to achieve climate sustainability. In addition, pedagogy and education sectors are linked to climate change justice. The employees in the sectors help unemployed people find new employment (just transition) and give young generations skills for the future (intergenerational justice). For employees, the most visible changes in the sectors are curriculum changes and changes in study material. However, pedagogy and education work will not change on its own. Sufficient further training must be provided to the professionals in these sectors. They also need working hours to adopt the climate competence that they need in order to do their job.

Information and administration sector

There is a varying correlation between information and administration sector jobs and climate change. As with other kinds of indoor jobs, the effects of climate change on the information and administration sector's working conditions largely depend on how workspaces react to changing weather conditions.

Aula Research Oy

12.4.2021

There is little research information on the direct correlation of libraries and climate change, but libraries have their role as providers of information for, say, education, research and teaching. In the ICT sector, on the other hand, the impacts of climate change are significant: The sector can develop solutions for curbing climate change. On the other hand, the sector needs to reduce its climate burden. Both factors can affect work duties.

Technology and transport sector

The subjects of a separate inspection in the technology and transport sectors were transport, properties, water management, forest sector and energy production. In situations where the transition to new kinds of production methods requires significant changes in workplaces, such as in energy production, one should especially pay attention to updating competence and to the continuation of jobs. In all sectors, the root impacts of climate change have to do with changes in temperatures and humidity. In many technical production facilities, there is an increased risk of malfunctions. In addition, the distribution of produced basic needs (e.g. water, heat, electricity, transport) will become unstable, because distribution networks are burdened by extreme weather phenomena more often than before. In addition, the lifespan of infrastructure (buildings, roads) in the technology and transport sector will decrease in future weather conditions. In the technology and transport sectors, climate actions and preparing for climate risks rely on investments. Investments are needed both for repairing and updating the infrastructure of the sectors, but also for acquiring new kinds of technical solutions. Investments in these sectors are necessary, because the risks of malfunctions concern us all: We all need water, heat, electricity and transport every day.

Security sector

Climate change affects security in many ways. Some impacts are direct, such as extreme weather conditions becoming more common. Others on the other hand are spill-over effects from the rest of the world, such as issues related to energy security and migration.

The workload of all kinds of security sector jobs will probably increase. Both direct and indirect impacts of climate change can be witnessed in the sector's job content, competence needs and demand. Extreme weather conditions change work duties, often in a more dangerous direction: Wildfires, floods and other natural disasters become more common. Accidents burden employees even more than before. The change in work duties requires a new kind of competence in many security sector jobs, from emergency response centre operators to rescuers. It is hard to predict how the work of police officers and security guards will change as a result of climate change. The changes will depend on the social and political consequences of climate change.

Security sector work is meaningful, but also increasingly dangerous because of climate change. Occupational safety and well-being at work will become even more important.

Aula Research Oy

12.4.2021

For more information on the report, contact:

Anna Malinen

Special advisor

Trade Union for the Public and Welfare
Sectors JHL

anna.malinen@jhl.fi

Juha Vekkilä

CEO

Aula Research

juha.vekkila@aularesearch.fi