



Green Competences for trade unionists: a case-based approach

Edited by
Franklin Kimbimbi

etui.

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Introduction

Without education initiatives there is a risk that climate and sustainability transition will stagnate.¹
(The Swedish Trade Union Confederation, LO-S, 2018)

The importance of education in promoting sustainable development has been widely recognised by the international education community².

Crucial to enabling individuals to confront new challenges, education thus plays a vital role in achieving sustainable development.

It provides people with the necessary knowledge, values, and attitudes to address emerging and key sustainability development issues such as climate change, sustainable consumption and production, preservation of biodiversity or poverty reduction.

Sustainable development topics can be taught at all levels of education, from primary to adult education, whether formal, informal or non-formal.

More and more trade union organisations across the world are incorporating sustainability education in their training offerings, thus playing an essential role in promoting sustainable development.

However, the fundamental question remains: how can trade unionists be trained to promote sustainable development? This guide aims to address this fundamental question.

In its 2020-2021 work programme, the ETUI Education Department announced the adoption of a sustainability competence framework approach guiding trade union training on the subject. This sustainability or 'green' competence framework refers to a set of competences which 'empowers learners to embody sustainability values, and embrace complex systems, in order to take or request action that restores and maintains ecosystem health and enhances justice, generating visions for sustainable futures³'.

At the origin of ETUI's green competence framework approach was a group work initiated by French universities and coordinated by Prof. Didier Mulnet from the University of Clermont-Auvergne, with the participation of social partners and student organisations⁴.

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1. LO (2018) The Swedish Trade Union Confederation environmental and climate policy programme: an investment-led national climate policy, p. 15.
 2. Buckler C. and Creech H. (2014) Shaping the future we want: UN decade of education for sustainable development (2005-2014), Final report, UNESCO.
 3. Bianchi G., Pisiotis U. and Cabrera Giraldez M. (2022) GreenComp: the European sustainability competence framework, Publications Office of the European Union, p. 11.
 4. Conférence des Présidents d'Université and Conférence des Grandes Ecoles (2016) Guide compétences développement durable et responsabilité sociétale. Cinq compétences pour un développement durable et une responsabilité sociétale.

This group work produced a competence framework based on five meta-competences⁵:

1. Collective competence
2. Prospective competence
3. Ethics and responsibility competence
4. Systemic competence
5. Competence in terms of change.

The ETUI faced the challenge of adapting these abstract meta-competences to a workplace context and workforce concerns, bearing in mind the underlying question: how can we live and work sustainably? To address this question, the meaning of these competences was agreed as follows:

1. **Collective competence** refers to the ability of trade unions to cooperate with each other and other social players. In other words, this competence involves showing solidarity within and beyond the trade movement, building alliances with civil society.
2. **Prospective competence** means the ability to prepare for the future by anticipating new scenarios and narratives expanding the role of trade unions – and ultimately that of workers – in a world characterised by uncertainty.
3. **Competence in terms of responsibility and ethics** means the ability to act in accordance with ethical values. This means caring for current and future generations of workers in a carbon-neutral economy.
4. **Systemic competence** means a holistic approach when dealing with sustainability issues. It involves analysing environmental problems from the perspectives of different players, such as trade unions, employers, governments, local communities or investors. It also means ensuring that decisions taken in favour of some workers do not adversely affect others.
5. **Competence in terms of change** means the ability to identify and analyse strong and weak signals of change due to sustainability development challenges and their impacts on workers.

The ETUI's green competence approach addresses current and future generations of workers from sectors affected by these challenges. It is based on the general assumption that these competences should prioritise justice and equity in our societies.

Approach

In 2021-2022, the ETUI Education Department held two capacity-building training workshops on green competences. In them, a group of 15 European trade union trainers from various organisations⁶ designed pedagogical materials to develop these five 'green' competences.

5. Meta-competences “are ‘overarching’ competencies that are relevant to a wide range of work settings and which facilitate adaptation and flexibility on the part of the organization”.
<https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100152792>

6. The following trade union organisations were involved: The Association of Free Trade Unions of Slovenia (ZSSS), Cyprus Union of Bank Employees (ETYK), The General Confederation of Portuguese Workers - National Intersindical (GCTP-IN), The Confederation of Labour PODKREPA (Bulgaria), The General Italian Confederation of Labour (CGIL), Confederazione Italiana Sindacati Lavoratori (CISL), Workers' General Union, UGT (Spain), The National Confederation of Free Trade Unions of Romania- Brotherhood (CNSLR-Fratia), The 'Cartel Alfa' National Trade Union Confederation, The Confederation of trade unions of the Slovak Republic (KOZ).

A case study approach was recommended analysing a real-life situation through the contextual analysis of a few key events or conditions and their relationships⁷.

A good case study should be engaging and complex, while avoiding too many details. It should also include a dilemma or controversy to make it more realistic.

There is no standard format for presenting a case study. Its structure and format depend on its objective. For example, some case studies use a problem-based approach where the trainee finds a solution by exploring and analysing the problem independently. Other case studies are structured around contextual information about a topic or issue, with trainees developing competencies through guided discussion and active learning methodologies.

The chosen format for the green competence case studies was centred around 'just transition'. They were designed to achieve specific pedagogical objectives using active learning methods and techniques.

A list of guiding questions at the end of each case study helped structure trainee discussions, while a list of resources and references helped deepen knowledge of specific concepts.

Structure of this guide

This guide provides training material based on the five green competences. It includes 27 activity sheets aimed at developing learners' green competences in various sectors, such as agriculture, tourism, education, construction, transport, and mining... Moreover, the guide offers a series of integrative activity sheets covering multiple green competences.

Each activity sheet has a similar structure, including the main topic(s) covered, target audience, duration of the pedagogical activity, structure of the activity, pedagogical objectives, presentation of the case study, contents of the activity, tasks and/or questions, and related concepts and references. These activity sheets are specifically designed for trade union trainers to use during their training sessions for officers and representatives.

Trainers can choose the activity sheets they wish to explore to create their training programmes. However, since the five green competences are interconnected, it is recommended to cover them all in training course.

Our hope is that trade union organisations will use this guide to develop plans, build alliances, and anticipate changes with a view to providing workers with rewarding and sustainable jobs for generations to come!

Franklin Kimbimbi

Education Officer, ETUI

Coordinator of capacity-building training on green competences

7. Wei C.A., Brown M. and Wagner M. (2018) Pursuing the promise of case studies for sustainability and environmental education: converging initiatives, *Case Studies in the Environment*, 2 (1), 1-8. <https://online.ucpress.edu/cse/article/2/1/1/33934/Pursuing-the-Promise-of-Case-Studies-for>



Activity sheet 1

Ethics and responsibility competence

Javier Vaquero and Laura Weber

Main topics

1. “Social responsibility” of trade unions means responsibility towards its society to improve the living conditions of all people. It is based on the concept of solidarity, which is the basis of the common action that trade unions promote.
2. The role of trade unions as an active social agent.
3. The future of trade unionism.

Target and duration

Target: Trade union officers and representatives.

Duration: From 1 h 30 to 1 h 45

Structure of the activity

This activity is to develop the “first” meta-competence (“Ethics & Responsibility”) and will follow the initial introduction to the “green competences” or “meta-competences” and the explanation of the concept of “Just Transition” for the unions (for example introducing examples of impacts felt in different sectors or related concepts, such as “sustainability” and “circular economy”).

Being the activity of the “first” meta-competence and taking into account that it has to be an organisation of groups that have not worked together previously, it is established that the main content will be a group discussion. The trainer(s) can mediate and organise or allow the participants to adopt roles freely in the group.

1. Introduction to the case study and the meta-competence “Ethics and responsibility” (5-10 min).
2. The participants in the training course are organised into 3-4 groups (“ice-breaking” activity or another way to create the groups) (10-15 min).



3. Read the dialogue in a group (10-15 min).
4. Discuss within the group and use the questions at the end of the dialogue as reference to guide the debate (30-45 min).
5. Choose a spokesperson to present the comments and opinions in plenary session (15-20 min, 5 per group).
6. Collect group conclusions and draw together a list of main and common elements (10 min).

Pedagogical objectives

1. To reflect on the social responsibility of trade unions.
2. To reflect on the values and responsibilities of trade union organisations towards non-members.

The case

Context and characters

- John is a middle-aged worker for an electricity big company. He has been working for 20 years in the company and has good working conditions (full-time work, good income) and a lot of social benefits (private retirement plan, scholarships for children to study, the supply of free energy at home and others). He is a member of the union and recognises his union's work on improving conditions in the company and considers the benefits that he receives as a worker are rights to be preserved and that are worth fighting for.
- The second character is a young woman named Maria, who works in a station ticket office, but is the only person there and is responsible for opening and closing the station. She is a part-time worker for a subcontractor of the railway company, with only a minimum wage. She needs to supplement her income with other tasks (informal work probably). For this job, she had to move from her hometown in a coalmining region. She is not happy with her situation, which presents no opportunity for improvement, and she fears losing her job and not finding a better one. In addition, the rise in food prices and especially of electricity at home is worsening her personal situation.
- Additional context: Maria doesn't like to mention that she knows the logo and colours of the electricity company John is working for. They are the same as those worn by her father in the power plant that operated for a long time in her hometown. The plant used to burn coal and because it caused pollution, it was closed. For her father and those who worked there, a plan was negotiated with the trade unions to work on dismantling the plant. For her and her friends, there was no option other than to migrate from a region where there were no more work opportunities.



Dialogue

At the railway station in a small-town, John is working on various repairs to the power supply lines into the station.

It is mid-morning and all the trains that take the early morning commuters and students to the big city have already passed. There will be no more trains stopping at the station until the afternoon.

Maria, the ticket office attendant, approaches him and says:

Maria: Good morning, how is the work going on?

John: Good morning, it's a complicated breakdown that's going to take me three or four more hours.

Maria: Well, it must be done this afternoon or otherwise tomorrow. I will be closing the station now because my work shift is over, and I won't be back until this afternoon. I can't leave anyone inside the station.

John: But they told me to come and fix this breakdown, it is urgent for the company, and I have to fix it today.

Maria: Well, I'm sorry, I'm only paid to work here for three hours in the morning and two in the afternoon and I can't stay longer because I have another job to make ends meet.

John: Does the railway company pay you so badly?

Maria: I don't work for them, I was hired by a subcontractor, and they make me change employers every year. They pay me the minimum wage and as it is a part-time job, they even deduct a proportion of that. That's not enough to pay the rent and food at home for the whole month and so I had to look for some other work.

John: The subcontractors, of course. We had to go on strike at the electricity company because they wanted to subcontract our work and make us redundant. We were on strike for 20 days, we almost didn't get paid that month, but we managed to win. The union got us a good agreement. The company told us that the subcontractor would give us work, but we knew they would pay us much less. We would also have lost all the rights that the electricity company gave us, our private retirement plan, scholarships for our children to study and the supply of free energy at home.

Maria: Free electricity, what luck! I must call the power company to request the application of the new subsidised rate, because as the price is rising so much, I can't afford to pay the normal rate. Thank goodness, the unions have put pressure on the government to at least help those of us who work for the miserable minimum wage.

John: Yes, the unions are also pushing for social benefits and now they are asking for the minimum wage to be raised. I am a registered member. Are you a member?

Maria: I don't have enough money for that either.

Tasks

1. Read the dialogue in a group.
2. Discuss within the group, to answer the questions at the end of the dialogue.
3. Choose a spokesperson to present your comments and opinions in plenary session.



Questions

John's perspective

1. Does the work of trade unions have to remain within companies and only be dedicated to labour rights and unionised workers?
2. What can unions do for non-unionised workers in companies?
3. Should they press the government for social rights, as well as labour rights?
4. Moreover, do these actions in favour of workers as a collective or for the whole of society must be supported by the resources of union members?
5. Is the solidarity principle of the trade union, where members pay a membership fee without having exclusive rights compared to other workers, sustainable?
6. Do the workers who are organised as members in the companies have 'priority rights' to be represented by the union?

Maria's perspective

7. Is it possible for Maria to be a union member if she works for an agency (a subcontractor)?
8. What happens if she cannot afford the membership fee? Will the trade union still fight for her?
9. What benefit does she have from a membership? Can the union help her to obtain a better contract? Maybe even another job or a better qualification?
10. Why doesn't the union ensure a Just Transition – a revitalisation of her region?

Concepts and references

In Spain, the main unions UGT and CCOO and some others, are working to improve the conditions of workers, including outside companies.

A major topic is the minimum wage and the way it is affecting an increasing number of people in many sectors: young workers who have to accept low wages, service sectors (commerce, home services, tourist activities, hotels and restaurants) with mainly women working for subcontractors, etc.

<https://elpais.com/economia/2021-09-07/a-quien-afecta-la-subida-del-salario-minimo.html>

<https://elpais.com/economia/2020-12-19/el-dificil-equilibrio-entre-pagar-y-cobrar-lo-minimo.html>

In addition, rising prices of food and supplies (electricity, fuel, natural gas) are hitting those at risk of poverty hard because they earn the minimum wage or even work part-time, which further reduces their income.

When the unions negotiate for the “Just Transition” in cities or regions affected by the closure of pollution power plants, they become a social agent, looking for new industries or companies to establish in the area and obtain jobs for the redundant workers from the power plant. But they are also related with the local government and other agents looking for new economic activities for those indirectly dependent on the income provided by the electricity industry in the area.

<https://www.publico.es/sociedad/centrales-termicas-espana-cierra-martes-mitad-centrales-carbon.html>

In Slovenia since 2021, the minimum wage is calculated in relation to the minimum cost of living figure that was last calculated in 2017.



The unions are trying to put pressure on the government to calculate the minimum cost of living up to the end of 2021 as the prices have been going up and also to increase the minimum wage for 2022 by a little over 10%.

<https://www.dnevnik.si/tag/minimalni%20%C5%BEivljenjski%20stro%C5%A1ki>



Activity sheet 2

Ethics and responsibility competence

Roberta Villa
and Miroslav Lacko

Main topic

Just Transition in the construction sector

Target and duration

Target: Trade union officers and representatives

Duration: 1 h 50 / 2 h

Notes / How to propose this activity?

This activity is useful to introduce and or deepen the concept of Just Transition, as well as to explore personal values toward the Transition and to reflect on the role of trade unions.

The activity should be scheduled at the beginning or during the first sessions of the training course.

The case study, based on a dialogue between two characters, is related to the construction sector in Italy.

As trainers, you have three possible choices:

- to retain the dialogue on the construction sector;
- to adapt the dialogue to a different sector, keeping a similar development and the same pedagogical objectives;
- to create two more dialogues, similar in content and development, regarding two different sectors, and create 3 subgroups. Each subgroup will analyse a different dialogue, answering the final questions. This choice would ensure that the whole group could explore different aspects of Just Transition, in different sectors.



Structure of the activity

1. Short introduction in plenary session: the Just Transition Concept (15-20 min).
2. Work in subgroups (60 min).
3. Report back in plenary session (15-20 min).
4. Comments and discussion in plenary session (20 min) – Recap of the main elements of Just Transition.

Pedagogical objectives

1. To discern the differences between the concepts of Ecological Transition and Just Transition, identifying the main elements of the latter.
2. To reflect on personal values towards the transition and the trade union role.
3. To list possible measures and policies to guarantee that the transition creates decent and quality jobs.

The case

Context

The main office of a trade union federation for construction workers, in Milan (Italy).

Characters

- Marco is a 31-year-old trade union officer, very passionate about ecology. He began working as a trade unionist 5 years ago. He has a University Degree in the Labour Market and works mainly in the Trade Union Office, doing research and offering assistance to workers who come to the Office. He is also an activist for an NGO, which works on ecological education.
- Andrea is a 55-year-old trade union leader. He has been working in the Construction sector for the past 20 years. He has lengthy experience and spends his working time visiting construction sites to give assistance and information to workers. He is also an expert in Vocational Education for construction workers.

Dialogue

Marco: Hi Andrea, how are you?

Andrea: Hi Marco, I'm fine, thanks. Just a little tired, maybe.

Marco: Yes, we are all working a lot... But, really, I'm pretty happy. There are a lot of new construction sites in town, and a lot of small construction sites to renovate buildings... The public incentives and eco-bonuses (4) have really given a boost to our sector. We are going to have many new members in our trade union. We can breathe more easily! Finally, after many years of crisis, the sector is growing...

Andrea: Yes, it is. But I'm not so happy with what I see every day on construction sites...

Marco: What do you mean?

Andrea: You mainly work here in the office. But I visit construction sites every day and I meet a lot of "irregular workers", who work without a regular contract of employment... Also, most of the new workers have no professional skills at all. Many of them are foreigners, they don't know their rights and they have not been trained. Companies need skilled workers, but they can't find them, so they hire anyone...



Professional workers have become after years and years of financial crisis and problems in the sector... We also have a lot of problems with Social Dumping (1) at the Construction Sites. Companies don't apply the proper Collective Agreements, to save money.

Marco: But these issues have always been there!

I think you are really negative: you have to see this phase as a major opportunity. I'm really happy that, finally, there is public and private investment in ecological transition.

Over the past ten years, our sector has been one of the most backward. Many workers have lost their jobs. Now, we will invest in new technologies, materials, and systems to reduce the dispersion of energy and lower environmental impact... I'm sure that the new technologies will also create new jobs...

Andrea: Maybe you are right, but this transformation doesn't happen by magic. And it doesn't necessarily happen in a fair way. At present, we see the risk posed by overworking and speeding up the work to meet deadlines for public incentives.

You know there is a lack of controls by the Public Officer at construction sites and many companies want to win back what they lost during the financial and pandemic crisis... With unskilled workers and high unemployment rates, it can be a perfect storm: on national level, we record many injuries every day, as well as a lot of incidents involving death.

Marco: So, you don't see any positive element in the ecological transition? The climate crisis is more and more obvious to everybody. We, as trade unions, have said many times that it's time to act, because "There are no jobs on a dead planet" (2), and we have to think about future generations...

Andrea: I don't mean that. I do see positive aspects. The European Green Deal (3), public incentives such as Environmental Bonuses (4) and new technological solutions, such as digitalisation and new materials. They're all good.

However, as trade unions, how can we guarantee that any new jobs will be decent and of good quality? How can we protect the most vulnerable workers, as well as the oldest ones?

That's not what is happening right now. Surely our sector is strategic for reducing the environmental impact of houses and buildings, but the so-called green economy doesn't automatically create quality jobs.

We don't need just a transition to a green economy, we need a "Just Transition" (5), forgive the pun.

Marco: What do you mean by Just Transition?

Andrea: I mean that the transition also has to be fair from a social perspective. It has to be a socio-ecological transition, which means a transition where the social and ecological aspects go hand in hand.

For instance, we should train or re-skill workers to guarantee well-paid, good-quality jobs, and offer social protection for workers who lose their jobs... We have to work on social dialogue (6) with the National Government, Local Institutions and Company Representatives to guarantee that the transition will not leave people behind and that it will not create worse working conditions...

Marco: My dear Andrea, I see your point, but aren't you setting the bar too high? Do you think we, as a trade union, can play such a big role? Our strengths are limited... For instance, what do we need to do to guarantee a Just Transition in our sector, in your opinion?



Task

1. Read the dialogue in a group.
2. Discuss within the group, to answer the questions at the end of the dialogue.
3. Choose a spokesperson to present your comments and opinions in session (5 min).

Questions

1. What do you think about this dialogue? Which character do you agree with more and why? Do you agree or disagree with Marco suggesting that Andrea is setting the bar too high? Explain your position.
2. Which role should trade unions play, in your opinion, regarding climate change issues and ecological Transition?
3. Are there any pieces of information or concepts in this dialogue that you are not familiar with? Underline them and try to clarify them through the Concepts and References paragraph. Explain them in your own words.
4. Identify the main elements of the Just Transition concept, both from the previous presentation and from the dialogue
5. What do you mean by “Just” in a transition to a low “environmental impact” economy in the construction sector? (or in the sector/sectors chosen as context of the dialogue)
6. Define together what you should answer to Marco’s last question, as if you were Andrea. Write down your answer.

Concepts and references

Social dumping

https://ec.europa.eu/home-affairs/pages/glossary/social-dumping_en

European Green Deal

https://en.wikipedia.org/wiki/European_Green_Deal

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

Environmental Bonuses

Environmental Bonuses (called “Eco-Bonus” in Italy) are policy measures adopted by the Italian Government in 2020 and 2021. They consist of tax breaks that can be applied for by private citizens and condominiums that decide to carry out building renovations, energy efficiency and building safety.

Just Transition

https://drive.google.com/file/d/1bur2CzdggC5xDzgzUKYxf9vXjtgd_To1/view?usp=sharing

https://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang--en/index.htm

Social dialogue

<https://www.ilo.org/ifpdial/areas-of-work/social-dialogue/lang--en/index.htm>



Activity sheet 3

Ethics and responsibility competence

Ivelina Hubenova
and Pasquale Pignatale

Main topic

Just transition in the metal industry

Target and duration

Target: Trade union officers and representatives

Duration: 2 h 30

Structure of the activity

The activity can be included within a broader path dedicated to environmental impacts produced in the metal industry.

1. Short introduction in plenary session: the Just Transition Concept and objectives of the activity (15-20 min).
2. Work in subgroups (1 h 30).
3. Report back in plenary (20 min).
4. Comments and discussions in plenary (20 min).

Pedagogical objectives

1. To highlight the key values of Just Transition in the metal industry.
2. To reflect on personal values towards transition and the dilemma between job preservation versus the issue of health and safety and environmental sustainability.



The case

The story is set in a metalworking company in a country where the government considers steel production strategic.

The company employs 8,000 people and related industries generate jobs for an additional 10,000 people.

The company was founded in the 1960s and produces dioxin emissions beyond the permitted limits. The surrounding area is heavily polluted.

The government with various legislative decrees has granted exceptions to production by raising the emission limit threshold.

Cancer deaths from factory emissions of pollutants into the atmosphere have increased in recent years.

After another death from cancer, the union proclaims a strike and calls for the conversion of the factory.

Characters

- Giovanni: 50-year-old worker, union member, employed for 25 years, with a wife who stays at home, one son in university and one daughter in high school, with a mortgage to pay who does not intend to join the strike.
- Francesco: 42-year-old trade union representative, environmental activist who knows the environmental impacts of the company, is the son of a company worker who died of cancer and is pushing for the conversion of the company.

Dialogue

Giovanni: Hi Francesco, I'm sorry but this time I don't join the strike.

Francesco: Why, you've always been on our side.

Giovanni: I'm still on your side, but I don't want to miss another payday. However, nothing ever changes. Even the judiciary has blocked the production of the factory several times, with the risk of being sacked, but then the government restarted it. We are alone against everyone!

Francesco: But look, we're getting closer to the goal.

Giovanni: What goal are you talking about? The closure of the factory? And where do I go then at 50? This is my job and I want to keep it tight ... Even the union once stood up for the reopening, to defend jobs. What is changing now?

Francesco: We don't want to close the factory, we never wanted to do it, but we want to push for Just Transition. Don't you want working conditions and wages to be improved? We deserve to have quality workplaces that meet occupational safety. If we don't give a strong signal, they will continue to kill us. Do you know how many workers got sick and how many died in the last 10 years?

Giovanni: From what I have seen in recent years, there has always been a lot of talk, and nothing has ever been done. Because? Is there no willingness to bargain? Are there not enough resources? In my opinion the factory is too old. It is a very difficult path to try to reconvert it. If we go to a fight, we risk closing forever.

Francesco: Have you ever even thought about the enormous damage that has been done to the environment? They also found dioxin in breast milk. More than 2,000 head of cattle that had grazed on contaminated fields were culled. How long will it last? The company has had several opportunities to use the best technologies available and to reclaim the territory and has never done so.



Giovanni: I am aware of the damage to this factory. All were accomplices. I've been breathing this shit for over 20 years, and nothing has happened to me yet. The fights had to be done a long time ago. It's too late for me. And then the union struggles have never worked in this company, you know how the company behaves with those who go on strike. They start bullying. I do not want to risk. Besides, I just do my job. I'm not the one responsible.

Francesco: Every action we take in the company contributes to causing impacts on the environment. In addition to technological investments, you can also start simply by improving work processes. You can do training for this, and it has never been done by the company. The union must have the defence of the workplace at heart, trying to mitigate environmental impacts. The trade union must start thinking from a system perspective, involving local authorities, associations and universities. Each of us is involved and must contribute. Now there are also the funds. We can use funds from the National Plan for Recovery and Resilience. The company can become environmentally sustainable, we must strive to improve working conditions with new jobs.

Giovanni: The government has always turned its back on us. How long will it take for Just Transition? Maybe we should fight to keep what we have.

Contents and tasks

1. Brief introduction on the context and objectives of the activity (20 min)

- During the introduction the trainers will explain and present information about trade unions and demand for a Just Transition in the steel industry.
- Read the case individually and then as a group.
- Discuss the case by answering the following questions (by way of example, from the Giovanni/Francesco point of view):
 - What are the underlying personal values expressed by Giovanni and Francesco in the dialogue?
 - Which arguments do you think carry the most weight in the discussion?
 - How to reconcile the issue of health and safety with environmental sustainability and job preservation?
 - Which role should trade unions play, in your opinion, regarding ecological transition in the metal industry?

2. Work in subgroup (1 h 30)

- The trainers will divide the participants into 4 groups (minimum 3 participants for each group).
- 2 groups will work from the Francesco point of view (60 min).
- 2 groups will work from the Giovanni point of view (60 min).
- After 60 minutes, you join the group working on the same point of view as you.
- You exchange your respective solutions and find differences and common points (30 min).

3. Report back in plenary (20 min)

- Prepare the material to be presented in the plenary.
- The 2 groups working on the same point of view nominate 1 or 2 spokespersons who will present the work done in plenary (10 min per group).

4. Comments and discussion (20 min)



Concepts and references

Just Transition - a necessary component of the new industrial revolution

[Just transition a necessary component of the new industrial revolution | UNECE](#)

European Green Deal

[A European Green Deal | European Commission \(europa.eu\)](#)

[A Just Transition Manifesto to save the Green Deal – EURACTIV.com](#)

Trade unions and the demand for a Just Transition in the steel industry

[Slide 1 \(tuac.org\)](#)

Methodology - Philips 2x4 x All

[1-2-4-All – ITC ILO Blog \(live-blogitcilo.pantheonsite.io\)](#)



Activity sheet 4

Ethics and responsibility competence

Gheorghe Simion, José Janela and Radu Stochita

Main topic

Just Transition in the education sector.

Target and duration

Target: Trade union officers and representatives

Duration: 1 h 50 / 2 h

Structure of the activity

1. Short introduction in plenary session: the Just Transition Concept (15-20 min).
2. Work in subgroups (60 min).
3. Report back in plenary session (15-20 min).
4. Comments and discussion in plenary session (20 min) – Recap of the main elements of Just Transition.

Pedagogical objectives

1. To accept different perspectives relating to Just Transition.
2. To articulate ethics and responsibility to Just Transition.
3. To formulate trade union requests related to Just Transition.



The case

Dialogue between 2 teachers trade unionists.

Characters

- António, 58 years old. Coordinator of the trade union.
- Ana, 35 years old.

António is focused on salaries, career, stability and work conditions. He has organised some big demonstrations against the government's measure to cut salaries and jobs.

Ana tends to be more focused on environmental issues. She participated in "Fridays for future" demonstrations prior to the Covid-19 pandemic.

Dialogue

Ana: Hi António, how are you?

António: Hi Ana, I'm fine, thanks.

Ana: Have you heard that we have a lot of teachers asking for training courses about digital empowerment?

António: Yes, but I did not pay much attention. Do you mind telling me more about it?

Ana: Yes, the massive digitalisation is an indirect effect of the pandemic. Throughout lockdowns we had to be in front of our computers. Not every teacher liked it, but we must acknowledge that digital education will co-exist with the traditional way.

António: It seems to be the case.

Ana: So, a group of us are thinking about how to develop those skills better, because we remember the troubles we were facing in March and April 2020.

António: I remember too. It was my first-time teaching kids online and I ran into difficulties when accessing the platforms. I felt like they were about to replace me with a younger generation or with robots, given how slow I was.

Ana: I am sorry you felt that way. That is the main reason why we are asking for trainings on digital empowerment, because we want the current teachers to develop the required skills.

António: Yes, but the online courses also showed an important aspect: education is not done online. Yes, in times of crisis, we can adapt to an online model of learning, but the real education is done in the classroom through the interaction of the students with the teacher and between them.

Ana: The online meetings can also save a lot of carbon if the teachers don't have to move to schools. And another important aspect to point out is the fact that through these online courses, teachers have saved a lot of time, between 30 minutes and 2 hours, depending on the distance from the school.

António: Yes, but some teachers don't have the computer skills to use information and communication technologies and it must be taken into account that there is a need to modify and adapt these courses for online teaching, which requires time.

Ana: So, we need to provide some courses and ask the Ministry of Education to train in digital empowerment and how to develop very good quality online courses.

António: Some teachers close to retirement age will find it very difficult and demotivating to start such courses now and adapt to these new technologies.

Ana: If we want an ecological transition, we need to pay attention to several aspects of this transition, and digitalisation is one of them.



António: Yes, but as a trade union we claim to have a Just Transition. We need to pay attention to questions of conditions of work, correct payment depending on the work done and another aspect is that the teachers can't be forced to do what they can't do....

Contents and tasks

1. Read the dialogue in a group.
2. Discuss within the group, to answer the questions at the end of the dialogue.
3. Choose a spokesperson to present your comments and opinions in session (5 min).

Questions:

- What do you think about this dialogue? Which character do you agree with more and why? Explain your position.
- Which role should trade unions play, in your opinion, regarding digitalisation issues and ecological transition?
- Are there any pieces of information or concepts in this dialogue that you are not familiar with? Underline them and try to clarify them through the Concepts and references paragraph. Explain them in your own words.
- Identify the main elements of the Just Transition concept from the dialogue
- What do you mean by “Just” in a transition to a low “impact” in the education sector?
- Define together what you should answer to Antonio to the last statement, as if you were Ana. Write down your answer.

Concepts and references

As it's said on the page about a global survey of 58,000 teachers, conducted by UNESCO and Education International: <https://www.ei-ie.org/en/item/25601:education-international-and-unesco-report-teachers-motivated-to-teach-sustainable-development-and-global-citizenship-but-need-more-support>

"Motivation, skills and opportunities to teach education for sustainable development and global citizenship" shows that over 90% of teachers feel these topics are important and over 80% of teachers want to continue to learn about them. One in four feel they need more support and training."

At the same time, students demand that climate education be included in curricula worldwide.

"Climate change is the single biggest issue that will affect us today and in the future. As young people, we need to be taught about the crisis, the solutions, and how to make a difference. We deserve to learn about the issue that will define our future."

As part of its Teach for the Planet campaign, Education International has called for quality climate education for all and has put forward the teaching profession's vision on what it would take to achieve it. Teacher training and support for the profession are essential to delivering quality climate education rooted in science and with a civic action focus. <https://www.ei-ie.org/en/dossier/1361:teach-for-the-planet>



So, it will be important that one trade union claim will be more training on climate change, environment and sustainable development.

New framework for a just digital and green transition <https://etuc.org/en/new-framework-just-digital-and-green-transition>

Case studies: <https://blog.itcilo.org/the-compass/methodologies/case-studies-2/>



Activity sheet 5

Ethics and responsibility competence

Andreas Andreou, Daniela Decinti and Lilyana Laskova

Main topic

1. Just Transition in agriculture.
2. The “Farm to Fork” Strategy for a fair, healthy and environmentally-friendly food system.

According to the Farm to Fork Strategy, all citizens and operators across value chains, in the EU and elsewhere, should benefit from a Just Transition, especially in the aftermath of the Covid-19 pandemic and the economic downturn. A shift to a sustainable food system can bring environmental, health and social benefits, offer economic gains and ensure that the recovery from the crisis puts us onto a sustainable path 1. Ensuring a sustainable livelihood for primary producers, who still lag behind in terms of income, is essential for the success of the recovery and the transition.

The main goal of this activity is to understand the concept of Just Transition in the agriculture sector, and the Sustainable Development Goals (SDGs), such as:

1. SDG 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
 - Micro SMEs can support and encourage small-scale farming, ensure sourcing from local entities and small-scale producers for office purposes as much as possible and demonstrate transparency in the agricultural supply chain particularly when sourcing.¹
2. SDG 6 - Ensure availability and sustainable management of water and sanitation for all.
 - The Agricultural and food supply chain MicroSMEs can conserve water. The agriculture sector is by far the largest user of freshwater, accounting for nearly 70 per cent of global water withdrawals.
3. SDG 8 - Principles to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.



Notes / Why this activity?

This activity is useful to introduce and/or deepen some of the concepts of the SDGs. This activity should be the opportunity to introduce the "Farm to Fork Strategy". More precisely, this case should be about the socio-economic impact of the "Farm to Fork Strategy".

The case study aims to address the following dilemma:

1. "Environment" versus "negative social impact".
2. "Short-term losses" and "long-term benefits".

This strategy supports the Just Transition by putting the emphasis on new opportunities for citizens and food operators alike. The creation of a favourable food environment that makes it easier to choose healthy and sustainable diets will benefit consumers' health and quality of life, and reduce health-related costs for society. People are paying increasing attention to environmental, health, social and ethical issues and are seeking value in food more than ever before. Even as societies become more urbanised, they want to feel closer to their food. They want food that is fresh, less processed and sustainably sourced. And the calls for shorter supply chains have intensified during the current outbreak. Consumers should be empowered to choose sustainable food and all actors in the food chain should see this as their responsibility and opportunity.

Target and duration

Target: Trade union officers and representatives

Duration: 1 h 30

Pedagogical objectives

1. To introduce participants to the Farm to Fork Strategy and the notion of a sustainable food system.
2. To reflect on personal values towards the transition and the dilemma between short-term losses and long-term benefits.
3. To formulate a shared vision and understanding of a sustainable food system in terms of "Ethics and Responsibility" competence.

Contents and tasks

1. Short introduction in plenary session: the Just Transition Concept and Farm to Fork strategy (20 min).
2. Explain what is a role play methodology (5 min).
3. Ask for 9 volunteers and give them the role to learn. Tell them they can also improvise (20 min).
4. Explain in plenary the context and run the role play (15 min).
5. Ask in plenary some questions to stimulate the discussion of the participants on the topic (20 min).
6. Recap the main elements of Just Transition (10 min).



Questions

Brainstorming to stimulate a discussion among participants

1. What do you think about the employer's attitude?
2. What would you have done in their position?
3. Do you think a compromise is achieved in the dilemmas above?

The case

Context

Due to the war in Ukraine, the cost of materials and energy has risen very much, and a lot of small farmers have failed.

Our case is based on a farmer family in Catania, in southern Italy, where the crisis is even harder than in the rest of Italy. The farmer wants to transition to bio-products and an eco-friendlier infrastructure, because his business in agriculture has been going badly every year for a long time now. However, as this entails capital investment requirements that will be requested from a bank, he expects to benefit by exploiting employee rights instead of finding other solution.

It is important to explain that the long-term benefits outweigh short-term losses. So far, the primary concern has been the impact on the environment. However, the social agenda (i.e., Social Taxonomy) is gradually being developing and employee related practices will attract investor attention.

This is a small farm with no employee representation.

Characters

Employer's family:

- Father: he is 65 and inherited the small farm from his father. He made it grow and now he has five employees.
- Mother: she is 47 and she is also daughter of farmers. Her family farm failed when she was an adolescent.
- Daughter: she is 25 and after high school she left studies and married. She works part-time in the family farm because she is very busy with her children.
- Son: he is 27 and after high school he left studies because he thought he didn't need to study to get a job.

Employees:

- A 60-year-old man who is waiting for the age of 63 to retire. He has worked on this farm since he was 18.
- A 53-year-old man who is a breadwinner because his wife doesn't work, and his son is at a North Italy University.
- A 30-year-old woman who has two little children.
- A 24-year-old man who is studying psychology at university.
- A 20-year-old woman who is studying economics at university.



Role-play

The employer's family gathers the employees in the assembly.

Father: As you know, for several years our business has not gone very well, so to survive and remain in business we have decided to transition to organic agriculture. Other farms are doing the same, because it seems to be the future.

To do this we need initial investments, so we are forced to ask you for sacrifices.

You must sign a new contract for 6 hours of paid work, but you will be expected to work for 8 hours as usual.

53-year-old man: What are you talking about? Are you crazy?

30-year-old woman: This is illegal! You are asking us to work extra hours without paying us.

60-year-old man: How can you ask me this after 30 years I have been working with you?

Mother: I know this is illegal, but our money is not enough to buy the machinery and other items needed for the transition. We have to ask the bank, which charges us lots of interest...

Daughter: If the farm survives, you will still have a job...

Son: Otherwise, we are forced to fire you and hire migrants who work more time for less money.

Mother: But we don't want to do this of course... we still want to work with all of you. You have done a good job...

60-year-old man: If it will be for a short time, it could be possible for me. But for how long do you think?

30-year-old woman: For me, it would be good to have a 6-hour contract forever, but I will work for 6 hours so I can have a better work-life balance!

24-year-old man: Even for me it is ok working a 6-hour contract for the time I am paid. I have to study!

Son: The transition to organic agriculture will need workers with new skills, so you can do a training course for the rest of the two hours...

60-year-old man: I don't want to do any training... I cannot learn anymore and I will retire in a few years...

53-year-old man: I really can't have my salary reduced. You know my wife is not working and I have to pay for my son's university in the north of Italy... You are forcing me to find another job... and as you know it is not easy here in the south of Italy and at my age... Anyway, I will go and consult the trade union...

Daughter: I understand your position... but you should understand ours, too... we are all in the same boat and we are sinking... the trade union won't give a job to you...

At this time, as an alternative, we can stop the role-play and ask the other participants who are watching the role-play to find some solutions, or we can go on as below.

20-year-old woman: Instead of doing something illegal, why don't we create a project in order to have it financed by the European Commission? The transition to organic agriculture is one of the targets of the "Farm to Fork" European strategy for a fair, healthy and environmentally-friendly food system.

Father: Is there any money we can have for the transition? Really?



Mother: But we are not able to create any project... I don't believe in this kind of thing. This is not for us...

24-year-old man: A friend of my father is an accountant... we can involve him in the project...

Son: Why don't we try? Let's make an appointment...

Daughter: We have nothing to lose... let's try!

Mother: It could be our last chance.

Father: I know we are wasting our time... but let's try!

20-year-old woman: I am sure we can succeed with the farm and with the environment too!

24-year-old man: And then you will have money to pay us more than now!

Concepts and references

Micro-, Small-, and Medium-Enterprises (MSMEs) and their role in realising the Sustainable Development Goals (MSMEs_and_SDGs)

https://sdgs.un.org/sites/default/files/2020-07/MSMEs_and_SDGs.pdf

United Nations Department of Economic and Social Affairs

<https://sdgs.un.org/goals/goal8>

Combating abuse of migrant labour in Italy

<https://www.etuc.org/fr/node/16033>

“Farm to Fork Strategy” of European Commission

https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en#:~:text=The%20Farm%20to%20Fork%20Strategy%20aims%20to%20accelerate%20our%20transition,reverse%20the%20loss%20of%20biodiversity



Activity sheet 1

Systemic competence

Javier Vaquero and Laura Weber

Main topics

1. Reduction of tourism and possible futures for the Balearic Islands.
2. Systemic approach to transition.

Target and duration

Target: Trade union officers and representatives

Time schedule: 1 h 30

- 5 minutes, presentation of the activity.
- 5 minutes, explanation of the general case.
- 5 minutes, briefly explain the context in every island and outside and to create the groups (each person is free to become part of every group).
- 30-40 minutes, for discussion and results.
- 25 minutes, group results presentations (5 minutes for each). This includes the discovery and unveiling of new concepts and terms.
- 10 minutes, conclusions of the activity.

Structure of the activity

1. Presentation of the activity.
2. Explanation of the case.
3. Explanation of the context of every island and outside.
4. Group discussion.
5. Conclusion of the activity.



Pedagogical objectives

1. Developing a holistic approach when analysing the consequences of a tax increase for international aviation at a territorial level.
2. Analysing the dynamic interconnections between different sectors in the tourism industry affected by this tax increase.
3. Reflecting on the role of trade unions in this dynamic.

The case

Fictional press report

Agreement at the Climate Change Conference - COP27 to increase taxes for international aviation

COP27 Egypt February 2022

The United Nations Climate Change Conference 2022 (UNFCCC COP 27) takes place in Sharm El-Sheikh, Egypt.

During this conference, all world leaders have decided to intervene in the rapidly worsening state of the world's environmental conditions.

They have been compelled to take drastic action following this winter's riots triggered by all of the failures that cold snaps have caused in Europe, Russia, China and North America, with thousands dying for lack of basic food and energy supplies. They also took note of the increase in severe droughts in the southern hemisphere that will affect the north next summer, with many crops failing and entire populations clamouring violently for solutions from their governments.

The leaders' meeting in Egypt also mentioned the need to reduce international mobility in order to combat the coronavirus pandemic that has been going on since the beginning of 2020 and which in recent months has accumulated millions of deaths and been periodically reactivated with new mutations of the Covid-19 virus.

The measure taken will affect international flights, which will see their prices increase by more than 200% due to the agreed new tax; the increased revenue will go into a climate fund for the countries worst affected and most impoverished by climate change.

Airlines and tour operators are expecting that these measures will lead to a drastic reduction in the mass tourism that has taken place in recent years in some areas of the world.

Tasks

1. Reflect on the general context of the Balearic Islands:
 - tourism as the main economic activity for the islands;
 - lack of alternatives for agriculture or basic industries;
 - many of the workers affected are from other regions of Spain and abroad;
 - many workers involved in the service sector (administrative or public services);
 - same description for the other islands.
2. Organisation:
 - 5 groups, 1 named for every island (Mallorca, Menorca, Ibiza, and Formentera) and another called "Spain and the rest of the world".



Questions

1. Think about all possible or probable cascading effects on the various sectors, but also on the population, starting from one specific sector (e.g., hotels). (For example, use the “causal diagram approach”.)
2. What do you think is most likely to be expected from the trade unions as representatives of the workers?
3. What could be the possible actions proposed, promoted or even implemented by the trade unions?
4. How is the situation in the Balearic Islands connected with other tourist destinations? Should the trade unions be more active internationally in supporting workers, or should each region fight for itself?
5. How can different interests be addressed? (e.g., job losses vs. benefits for nature, quality of living, preserving cultural heritage, etc.).

Concepts and references

Causal Diagram Approach

[Causal Diagrams \[The Climate Leader\] - YouTube](#)



Activity sheet 2

Systemic competence

Gheorghe Simion
and José Janela

Main topics

Systemic approach to green and a Just Transition at school
The tree of Eco-ideas

Target and duration

Target: Trade union officers and representatives (in the education sector, but not only)
Duration: 3 h

Structure of the activity

Steps of the activity:

1. Introduction of the topic and presentation of the activity (15 min).
2. Work in subgroups:
 - Read the case and establish the cascading impacts generated by the current multiple crises (30 min).
 - Coffee break (30 min).
 - Report back (20-30 min).
3. Creation of a common "tree of eco-ideas" in plenary (45-60 min).
4. Evaluation and conclusion (25-30 min).



Pedagogical objectives

1. To analyse the impacts determined by the multiple crises by taking a holistic approach and determining the dynamic interconnections.
2. To formulate some eco-ideas that may have broad and positive impacts on schools
3. To determine the possible areas of trade union actions from the perspective of achieving a Just Transition.

The case

The School Eco-Committee comprises representatives of students, board school members, an Eco-school coordinator, and members of the community (parents, municipality, environmental NGOs...). The objective of the Committee is to formulate environmental ideas and actions.

The context in which the school must carry out its activity is determined significantly by the post-Pandemic situation of Covid-19, the requirements established by NPRR and SDG 4 for the green transition. The situation has become even more dramatic due to multiple crises: global warming and the energy crisis, which may determine a possible and imminent water and food crisis.

You are a member of this Eco-Committee, representing one of the above stakeholders. In this meeting, your role, together with the other participants, is, in the first stage, to establish the possible cascading impacts of these crises on your school. Based on these impacts, make proposals for the creation of "the tree of eco-ideas". Each proposal will be written on a piece of paper in the shape of a "leaf" of a tree. The proposals will be grouped on the main "branches" of the tree represented on the board (we suggest...energy, water, sanitary sewage, the schoolyard and other specific topics).





(The trainer will give these examples of ideas at the end of the exercise.)

Many ideas may emerge from this sharing, such as:

- Create an organic vegetable garden.
- Install solar panels on the roof to heat water and produce electricity.
- Toilets with two flush options.
- Install LED bulbs.
- Identify school trees.
- Use only recycled paper at school.
- Using products from organic farming in the canteen.
- Use local agricultural products for meals.
- Fitting double-glazed windows.
- Provide more bicycle parking.
- Place devices to fill bottles and flasks with fresh water.
- Removing asbestos fibre cement roofing.

Tasks

1. Read the case in your group.
 2. Establish the cascade impacts generated by the current crisis context.
 3. Determine the "eco-ideas" and write each on a "leaf" paper.
 4. Fix the "leaves" on the board and the "specific tree branches" area; present the tree in plenary.
 5. Create a final "tree of eco-ideas" with trainer's support, fixing the useful and feasible "leaves" and eliminating useless and redundant ones.
 6. Determine what are the possible areas of trade union actions.
- Choose a spokesperson to present your comments and opinions in session (5 min).



Questions

1. What impression did this case make on you?
2. How do you appreciate the activity and result obtained in your subgroup?
3. What other comments, questions, or suggestions do you have for this activity?

Concepts and references

[Educators on a Heating Planet: Shaping Education Unions' Vision for a Just Transition \(ei-ie.org\)](https://ei-ie.org)

<https://thesystemsthinker.com/causal-loop-construction-the-basics/>

Support to do:

https://jamboard.google.com/d/1Dt5kL5N9FxbpvhADQFW_ZZXg7ru39Kv3JY4v1pcmXnw/edit?usp=sharing



SDG 4

NPRR for education sector

The tree of ideas



Activity sheet 3

Systemic competence

Andreas Andreou
and Daniela Decinti

Main topics

1. Impacts of climate change on sectors.
2. Circular economy strategy.

Target and duration

Target: Trade union officers and representatives

Duration: about 3 h

Pedagogical objectives

1. Create awareness of the consequences of climate change.
2. Analyse the impacts of climate change on a sector using the causal diagram technique.
3. Develop measures to reduce these impacts.

Contents and tasks

1. Introduction to the concept of “system” and “systemic thinking” by the trainer showing the video of Elisabeth Sawin, Co-director of Climate Interactive (see in references) and discussing it in plenary (30 min).
2. In plenary, the trainers show the UN “Nature for life” video (see in references) (5 min).
3. Participants will be grouped into 3 teams and then they will be asked to reflect on the questions below (30 min):
 - What are the Ps highlighted in the video?
 - What are the key problems exacerbated by climate change?



- What issues do people face because of climate change?
- Why are they all interrelated and thus creating a systemic impact?

A spokesperson chosen by each group will report in plenary (15 min).

4. Participants will remain in their initial 3 groups and the trainers will show two more short videos on the “circular economy” (Group A and Group B) and “responsible finance” (Group C) (see in references) (10 min). Then the trainers will ask the participants to reflect on the videos, answering some questions (30 min).

Group A

Reflect on the “technical cycle” of the circular economy, answering the following questions:

- What examples of circular solutions are provided?
- What were the circular solutions provided in the car example?
- What happens to the product’s useful life?
- What do we need to do?

Group B

Reflect on the “biological cycle” of the circular economy, answering the following questions:

- What are relevant products?
- What is the key characteristic of these products?
- What happens to the product’s useful life?
- What do we need to do?

Group C

Reflect on the “financing” of the circular economy, answering the following questions:

- When should financing be provided?
- What are the principles of investment?
- What types of financing are provided?
- What do we need to do?

Each group chooses a spokesperson who will report in plenary (15 min).

5. Each group chooses a sector that it knows well and analyses the impacts of climate change on this sector using the casual diagram technique. It will then develop, as trade unionists, some measures to reduce these impacts using a circular economy strategy (60 min).

A spokesperson will report back (15 min).

Concepts and references

<https://www.youtube.com/watch?v=p8Km4MUMiWE&t=16s> Video of Elisabeth Sawin Co-Director of Climate Interactive on the concept of “system” and “systemic thinking”

<https://youtu.be/efP7BxIE-pk> UN “Nature for life” video on the interconnections

<https://youtu.be/Lc-FQvPO89Y>“ video on the concept of “circular economy”

<https://www.youtube.com/watch?v=9kb9HsHHDjM>“ UN video on the concept of “responsible finance”



Activity sheet 1

Prospective competence

Javier Vaquero and Laura Weber

Main topic

The role of trade unions in creating (green) quality jobs, developing certain sectors, assuring education and skills for new/green jobs.

Target and duration

Target: Trade union officers and representatives

Duration: From 1 h 30 to 1 h 45

Structure of the activity

1. Introduction to the case study and the prospective competence (5-10 min).
2. The participants in the training are organised in 3-4 groups (“icebreaker” activity or another way to create the groups) (10-15 min).
3. Read in group the dialogue (10-15 min).
4. Discuss within the group and use the questions at the end of the dialogue as reference to guide the debate (30-45 min).
5. Choose a spokesperson to present the comments and opinions in plenary (15-20 min, 5 per group).
6. Collect group conclusions and draw together a list of main and common elements (10 min).

Pedagogical objectives

At the end of this activity, learners will be able to formulate elements of a strategic transition vision in a coal region facing a transition towards climate neutrality.



The case

Context

Background information and character description:

Depopulation and the forest - who will remain here?

In a mountainous and forested region there are several coal mines and a thermal power plant, as well as several chemical and processing industries that take advantage of the proximity of the power plant.

There are several villages and a small town in a valley far from major roads and for years they have been suffering a slow depopulation as local industries become automated, or their production is relocated to other places with better communications or cheaper raw materials.

There is a lot of concern in the region and municipalities are organising themselves to address the issue. In the region, they know that they are just a small valley and that regional governments develop their policies with cities and populated areas in mind. So, they know that they must organise themselves to support and care for themselves. A few years ago, they set up an association of municipal services that has enabled them to have better quality waste collection, water supply, sewerage, and other services at a lower cost than if each municipality did it on its own. They have also managed to get the government to organise medical services and educational centres as close as possible, only needing to travel to the capital for serious health cases. And for young people's studies, they only leave the valley once they have completed their compulsory education and with bus services that take them to and from school daily.

Organising together has given them results and also a sense of pride in what they have achieved which, as they say today, has empowered the people of the valley and they feel that they can make their own decisions about their future, as they are also aware that as they are small in population they are not a market for large companies and in recent years they have not had many offers to set up new companies.

In recent weeks, mine managers have been trying to mobilise the population because they say they will have to stop coal production because the government has agreed to achieve climate neutrality by 2050 that means it will ban the burning of coal, which will lead to the loss of many jobs.

In the town hall of the most populated town in the valley, a meeting has been organised to discuss the issue of the closure of the mines. In the meeting there have been several interventions and some of them have been very negative because they say that if the mines are closed, so will the thermal power station and the industries in the area. They also believe that as the population will decrease because the workers will have to leave to look for work in the big cities, the valley will have no chance of being sustained, and they will all be gone in a few years.

Among the participants, the trade unions in the area have been called together. There are two different unions that have members and representatives in the mines as well as in the industries. The interventions of the unions are made jointly because both have already been dealing with this issue in their organisations and have a very similar vision of the future.

The first speaker was **Paco**, the representative of one of the unions, a young man born in the valley. He works at the thermal power station.

Sara, a middle-aged woman with children, spoke for the other union. She works in the laboratory of one of the industries in the area that produces chemicals (chlorine and



aniline), taking advantage of the proximity to the thermal power station that supplies them with the large quantities of electricity they need for their production.

Dialogue

Intervention from the trade unionists:

Sara: Those of you who have spoken are right, there is a lot of concern in the valley and the horizon can look very dark when the mines close because we all know that so will the thermal power station that burns that coal. Also, industries like the chemical industry where I work will leave and we don't see other options for new industries that want to set up in the area, so we will have to find options for us and for the young people we have in the valley who also need an open horizon for the future, so they don't think about going to the city.

Paco: In the mine there are fewer and fewer workers and in the thermal power station and the industries many are already thinking about their future once it closes and the few years that will be needed to demolish and recover the area by eliminating the pollution and waste have passed.

Sara: We have also thought about our future, not only personally, but as trade unions. As you know we are organisations that are created by the workers in the companies and when they disappear in a short time we will disappear too unless we contribute to create new activities in the valley and the workers continue to support us and re-join us in the new jobs.

Paco: That's why we are here, to participate in the creation of a future horizon for the valley, contributing our knowledge and our means.

Sara: In the town councils and the municipal association you have very direct contacts with the companies, and we believe that the first step must be to involve them in creating a future once the companies close.

Paco: We know that the managers and directors of the companies will try to drag out the decision-making until the last minute and will want to leave the administrations the responsibilities for what they leave behind, all the waste and the industrialised areas that will not be needed.

Sara: We ask you to talk to them and make them see that they can extend their activity if they participate to make orderly closures of companies. Climate neutrality doesn't only result in pollution bans and closures of polluting companies. A Just Transition Fund will be available for our coal-dependant region to support the socio-economic challenges related to the transition towards climate neutrality. To reach them, plans must be presented that are supported by local administrations like yourselves.

Paco: As you can see, we as trade unions and workers are already preparing for the situation of closures that will come in the next few years. And we want all of us to get involved to make this change a fair transition process, leaving no one behind and giving a future to the valley and to those of us who want to continue to live and grow here.

Tasks

1. Read in group the dialogue.
2. Discuss within the group, to answer the questions at the end of the dialogue.
3. Choose a spokesperson to present your comments and opinions in plenary.



Tool for the trainer: "[Visual toolbox for system innovation A resource book for practitioners to map, analyse and facilitate sustainability transitions](#)" Backcasting pp. 110-111

<https://transitionsclub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>

Questions

1. Describe the challenges the region is facing related to the future shutdown of its coal mines and coal-fired power plant.
2. Which sections of the populations will be the most affected?
3. The Just Transition Fund could play a role in incentivizing the region to think long-term strategy (an outlook with a 30 years' time horizon) about its transition towards sustainable energy. Define in groups the vision for the region's future from Sara and Paco point of view by using a technique called "**backcasting**":
 - Which types of projects should be funded through the Just Transition Fund?
 - How to ensure social dialogue and the involvement of communities affected?
4. Where will the communities affected get all the knowledge needed to transform the companies in the valley? Can the unions help them with that?
5. The young people living in the valley should be prepared to the jobs of their future, how can they do that, who knows, which jobs will be needed?
6. What about social security, what will happen with the older workers? Will they still get decent pay and a decent pension?
7. Is the promise 'no one is left behind' even possible to keep or is it just a platitude?
8. What role could the TU play in the future to promote social justice in the transition?
9. Who will manage the transition for workers, companies, and municipalities?
10. How can the workers persuade the companies to make orderly closure? Can other institutions help them?

Concepts and references

Promoting Green Jobs: Decent Work in the Transition to Low-Carbon, Green Economies
<https://journals.openedition.org/poldev/3107#tocto2n3>

Green and decent jobs

https://www.ituc-csi.org/IMG/pdf/greendecentjobs_madesimple.pdf

EU policies aim to deliver secure, sustainable and affordable energy for citizens and businesses

https://ec.europa.eu/energy/sites/default/files/documents/environmental_rehabilitation_and_repurposing_toolkit_-_platform_for_coal_regions_in_transition.pdf

New toolkits to support EU coal regions in transition

<https://ec.europa.eu/newsroom/ener/items/678083>

A Just Transition Fund – How the EU budget can best assist in the necessary transition from fossil fuels to sustainable energy ?

[https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU\(2020\)651444](https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2020)651444)



Activity sheet 2

Prospective competence

Ivelina Hubenova
and Pasquale Pignatale

Main topic

The role of the trade union in maintaining a safe, ecological environment at work and in the living, creating green quality jobs in the metal industry, ensuring education and skills for new green jobs.

Target and duration

Target: Trade union officers and representatives; and health and safety officers

Duration: 2 h 30

Structure of the activity

The activity can be included within a broader path dedicated to specific aspects and learning from the future.

It also highlights the role of the trade union and the different phases of an effective Just Transition Plan: idea generation method to involve participants, analysis of the various interests, financial sustainability, building consensus, and accelerating discussion.

1. Short introduction in plenary session: the Just Transition Concept and objectives of the activity (20 min).
2. Work in subgroups (1 h 30).
3. Report back in plenary (20 min).
4. Comments and conclusions (20 min).



Pedagogical objectives

At the end of this activity, the participants will be able:

- to formulate elements of a strategic transition vision in a metal industry region facing a transition towards climate neutrality;
- to reflect on the social responsibility of trade unions;
- to highlight the key values of Just Transition in the metal industry;
- to move forward a system innovation perspective.

The case

The steel industry represents one of the main economic sectors; steel is a material used by many other sectors of the economy as one of the most versatile and recyclable materials. This industry, however, is among the most polluting: among the heavy industries, the steel sector is in first place in terms of CO₂ emissions and second in terms of energy consumption.

The steel industry is an energy-intensive sector that for about 75% is satisfied by coal: this makes it sensitive to the volatility of fuel prices, considering that energy weighs between 10-40% in the total cost of production.

Due to the characteristics described above, the steel industry plays a key role in the effort to reduce polluting emissions. The same sector has set the following long-term goals for reducing CO₂ emissions from 1990 levels:

- develop technologies that reduce CO₂ emissions by 50% by 2030;
- reduce CO₂ emissions by 80-95% by 2050, reaching definitive climate neutrality (ESTEP - European Steel Technology Platform, 2020).

These are ambitious goals whose achievement requires the combination of different strategies and levers.

The story is developed through a dialogue between two workers in 2054 from a large metalworking company in a country where the government considers steel production to be strategic. One of them, the elder, remembers what it was like in the past and how the production processes were carried out back then.

The old management of the company employed 8,000 workers and involved a single-issue industrial sector in which 5,000 people worked, using old plants with polluting emissions beyond the threshold allowed into the atmosphere. Accidents and deaths at work happened with great frequency. The groundwater and aquifers and the surrounding land were severely compromised. The population was exasperated.

The European Union issued sanctions for exceeding the emission limits, the judiciary asked for the temporary closure of the plant to allow the reclamation of the environment, but the government granted production exceptions by raising the emission limit threshold. The company threatened layoffs in case of temporary closure.

The union played an ambiguous role between the defence of jobs and the request for the conversion of the factory.



Characters

- Pasquale: a 58-year-old worker, trade unionist, employee for 30 years as a specialist blast furnace worker, demonstrated in the past against the deaths at work and for the conversion of the factory.
- Ivelina: 26-year-old researcher, employee of the Technological Centre of the Faculty of Energy Engineering of the University of Taranto, partner of the company in the development of alternative energy that guarantees the company's energy needs.

Dialogue

Pasquale: Hi Ivelina, do you know that today is the commemoration of a very sad day for me and this factory? A very serious accident occurred where my colleagues lost their lives due to a fire involving seven workers. There were protests and strikes for days on end.

Ivelina: Hi Pasquale, I didn't know the details. A real tragedy. But weren't there any health and safety protection systems?

Pasquale: At the time the plants were very old and dangerous, there was no maintenance and sometimes it was the workers themselves who did not wear personal protective equipment. Furthermore, in those years, I remember, there were several popular protests. In addition to the numerous and frequent accidents, there were also environmental problems. Just think that when the winds blew from the north, schools were closed, the Municipality asked the population not to leave their homes so as not to breathe the polluted air produced by the company. Cattle were slaughtered because they grazed on contaminated fields.

Ivelina: Did you struggle with this situation?

Pasquale: At the time we could not imagine such a big change. We thought that to build what the company is today we would have had to stop everything and start from scratch. Most of the companies depended on steel and if the sector stopped, the whole country would have problems. There wasn't even the university where you studied. All our young people went out to study and only those who could not afford to study stayed here.

Ivelina: Taking into account the conditions of the old factory, was it competitive?

Pasquale: At the time the company produced a product that was not very competitive in international markets. The Chinese product, for example, was much more competitive.

Ivelina: And what did the union do? How were relations with other stakeholders?

Pasquale: At the time it was very difficult to create the conditions for a consultation on the development of the whole territory. The company weighed only to its own advantage. The government has always turned its back on us. We didn't believe in the conversion. We as a trade union felt so powerless.

Contents and tasks

1. Brief introduction on the context and objectives of the activity (20 min)

During the introduction the trainers will explain and present information about trade unions and demand for a Just Transition in the steel industry and meta-competence "Prospective".

Trainers will divide participants into groups (min. 3 participants in each group).



2. Work in subgroup (1 h 30)

You have to put yourselves into the future and describe it using present and past tenses.

- Read the case and the dialogue in your group.
- Take a large piece of paper and draw the canvas with its six different sections: use Template 1 and Template 2.
- **Imagine the future:**
 - What is my desired future?
 - Today there are things that we did not even imagine 10 years ago. In this case the future is 30 years ahead, what do you imagine could be functional to your idea of the future?
 - What needs to change primarily to make the desired future feasible? In the union and in the workers
 - What does your sustainable future look like?

Spend a few minutes to imagine individually and then discuss in your group. Use a post-it to write down as many ideas as you can, describing what the future looks like. You have 40 minutes to write down the ideas and discuss them. Then you have 10 minutes to pick out those most representative ideas for the future you, collectively, have built. This is the moment to build a common vision about the desired future for the challenge you have just defined.

- **An idea about the new future you would like to achieve**

Fill out the 6 steps of canvas to turn your ideas about the future into pictures, words and stories.

- Cover: The cover that tells your story, a message that is both attractive and easy to transmit.
 - Radical ideas: What ideas fuelled the process? Where did they come from?
 - Quotes: Any quotation that someone in the future might be saying about your project, innovations and success.
 - Headlines: description of the process and/or the outcome.
 - Stack of papers: background stories behind the history of your success. Pitfalls, drawbacks, milestones, new alliances, etc.
 - Images: Some pictures depicting your achievements or milestones achieved in the short, medium and long term.
- **After envisioning your future, you will need to build the pathway from the present time to that future**
 - What is needed to achieve such a future?
 - What are actions must I complete to have this ideal future?
 - How can I achieve my envisioned future?

- **Debrief**

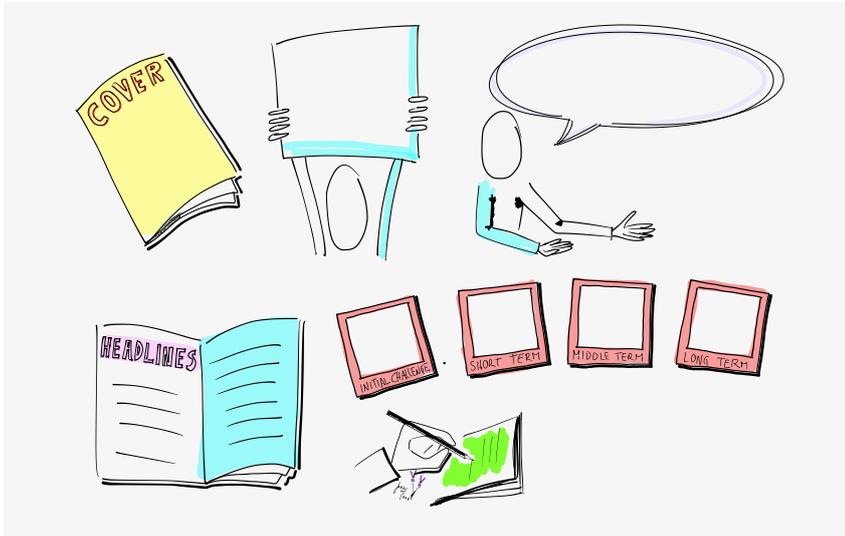
Now, with your new future in your pocket, spend some time reflecting on the outcome and the process.



3. Report back

Choose a spokesperson to present your task in plenary.

Template 1



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 119. <https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>

Template 2

The Canvas

The canvas is made up of six parts, each one describes a different aspect of the future or the process to achieve it.

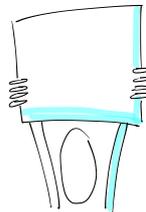
COVER

"Cover" tells the great story of your success. It should represent what the cover of main papers are saying about your story. How they describe it, what the headlines would be. This cover should convey a message both APPEALING and EASY TO CONVEY.



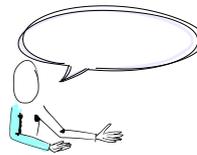
RADICAL IDEAS

"Radical Ideas" documents initial ideas for the project that drove you to this shiny future. That is, the ideas underlying the RADICAL INNOVATION. What ideas fuelled the process? Where did they come from?



QUOTES

Write down any quotation that someone in the future might be saying about your project, your innovations and your success. "Quotes" can be from anyone as long as they're related to the story. Quotes should be INSPIRING



HEADLINES

"Headlines" convey the substance of the cover story. It is something other than the mere cover. It must be FUZZY but SPECIFIC enough to be turned into an agenda. Some description of the process and/or the outcome.



STACK OF PAPERS

"Stack of papers" reveals the background stories behind the history of your success. Pitfalls, drawbacks, milestones, new alliances...



IMAGES

"Images" stand for the initial challenge and the changes achieved in the SHORT, MIDDLE and LONG TERM. Draw some pictures depicting your achievements or milestones.



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 120. <https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>



Concepts and references

Just Transition - a necessary component of the new industrial revolution

[Just transition a necessary component of the new industrial revolution | UNECE](#)

European Green Deal

[A European Green Deal | European Commission \(europa.eu\)](#)

[A Just Transition Manifesto to save the Green Deal – EURACTIV.com](#)

Report of UN for Taranto

[UN Report: Ilva Taranto among the most polluted areas in the world - UN Italy \(onuitalia.com\)](#)

Trade unions and the demand for a Just Transition in the Steel Industry

[Slide 1 \(tuac.org\)](#)

Visual toolbox for system innovation. A resource book for practitioners to map, analyse and facilitate sustainability transitions - p.118-p.125

https://www.researchgate.net/publication/307994849_Visual_toolbox_for_system_innovation_A_resource_book_for_practitioners_to_map_analyse_and_facilitate_sustainability_transitions



Activity sheet 3

Prospective competence

Plamena Parteniotis, Lilyana Laskova and Radu Stochita

Main topic

Labour transformation in public transport resulting from green and digital transitions.

Target and duration

Target: Trade union officers and representatives

Duration: 1 h to 1 h 15

Pedagogical objectives

At the end of this activity, participants will be able to formulate elements of a strategic transition that protects the workers in the regions.

1. To reflect on the social responsibility of trade unions due to labour transformation resulting from green and digital transitions.
2. To reflect on the values and responsibilities of trade union organisations towards non-members (NGOs, citizens' groups, etc.).

Contents

Steps of the activity:

1. **Ice-breaking activity** (encourage the participants to share a word that crosses their mind when they hear about Just Transition) (5-10 min).
2. **Introduction** to the case study and the meta-competence "Prospective" (5-10 min).
3. **Read** the case study aloud (encourage each participant to read a couple of sentences, to keep them alert) (10-15 min).
4. **Discuss** the first half of questions as a group and encourage every participant to state their opinion (15-20 min).



5. Divide into smaller groups and discuss the second half of questions (15-20 min).
6. Choose a spokesperson to present the comments and opinions in plenary (5-10 min).

The case

Context

In 2019, the local council in Vienna launched an autonomous bus line. According to their project:

"The goal is to sustainably increase the efficiency and operational safety of autonomous vehicles, with the ultimate goal of operating a bus line in Seestadt under real conditions – with stops, timetables and real passengers."

The call for safety is often invoked by tech entrepreneurs who want to sell us driverless vehicles, presenting them as flawless. The Vienna driverless bus collided with a pedestrian in 2021, and in 2022, a driverless truck veered left, cut across a highway and slammed into a concrete wall. When these errors happen, the companies blame it on human error or pedestrians.

The driverless bus company in Vienna has been pushing for cost-saving operations, saying that cutting personnel would be a way to offer public services at a more affordable rate. In this process, the drivers, the ticket handlers or the inspectors will lose their job, being told that they can be replaced with robots.

The local government, regardless of the accident, has been contemplating expanding the line, saying that we must move towards greener sources of transport. The buses in the city are old, run on diesel and leave a thick cloud of dark smoke whenever leaving the stations. The environmental groups, businesses and citizens have been calling for a greener society. The public authorities have taken it a step further and instead of implementing electric vehicles with drivers, they have introduced driverless buses.

Characters

Janus is a driver for the municipal bus company and is at risk of losing his job. Without a clear direction of what to do and where to go, he went to the labour union and asked for help. Martin is the local trade union leader, and they met in a cafe.

Dialogue

Janus: Hi, Martin! Thank you for allowing me to come and talk to you, because I am a bit desperate. I like my job, I enjoy driving the buses, but now I am just a few steps away from losing it. It is hard to find a job in the current climate, and I am not sure if anyone will employ me at this age.

Martin: Hi, Janus! I am glad you reached out, because the situation is indeed grim. The pressure is on to move towards green energy, and even we, the trade unions, called for it, but did not anticipate the government taking such an abrupt step. We must have a forward-looking (prospective) vision and implement measures that help the workers, rather than disempowering them.

Janus: I agree, but what can be done in the current situation? I tried talking to the municipal agency, but they want to cut costs at all costs.

Martin: Everywhere we hear "cutting costs", but we must emphasise what this approach will do in the end. You cannot just remove money from public service and assume it will run as well as before. We know that public transportation needs money, needs to be subsidised to function, instead of being cut left and right.



Janus: You are speaking the truth, and I agree, because if we want to have a functioning society in the future, we should aim not to destroy whatever is left of our public transit system, but rather to develop it.

Martin: Yes, that is what we have been saying ever since when. Wait a second, someone is calling me.

Martin talks on the phone with an action-oriented local group that wants to fight against the introduction of self-driving buses. They do not agree with the company in which the buses were built. They were produced in Indonesia, where forced labour was used, and multiple cases reached the press. The action-oriented group mentions that an environmental association wants to push against the introduction of buses and has 200 people ready to rally in the streets.

Martin: Excuse me, I just got off the phone with some organisations and they said that they are willing to help. It is not only you who is dissatisfied with the current situation...

Janus: I will interrupt you, because all the people about to lose their jobs are angry and have been going left and right to fight for a solution.

Martin: Right! Well, now we have more people on board, and we can definitely think of some ways to resist. We can either go to a municipal meeting and present our demands...

Janus: Or we can freeze the city and convince the other bus drivers not to show up at their job.

Martin: I like the way you are thinking

Questions

1. Given the government's commitment to replacing the old buses with modern, driverless electric ones, what can unions do to protect the jobs of the working people?
2. How can the trade unions reach outside organisations (NGOs, citizens' groups) to encourage participation in this matter?
3. Is the approach of cooperating with other groups beneficial for the trade union movement and the workers? What are some of the tactics that organised labour can use in order to protect itself from organisations wanting to lessen its demands?

Concepts and references

Forward-looking (Prospective) vision: Concerning job creation, it is equally important to develop certain sectors around quality products and services as it is to achieve a reduction of working time (without loss of pay).

[Futurism] Driverless Bus Collides with Pedestrian in Vienna (<https://futurism.com/the-byte/driverless-bus-collides-pedestrian-vienna>)

[AIT] Auto.bus - Seestadt (<https://www.ait.ac.at/en/research-topics/integrated-mobility-systems/projects/autobus-seestadt>)

[MarketResearch Telecast] Autonomous buses are not proving their worth in Vienna (<https://marketresearchtelecast.com/autonomous-buses-are-not-proving-their-worth-in-vienna/90046/>)



Activity sheet 4

Prospective competence

Plamena Parteniotis, Lilyana Laskova and Radu Stochita

Main topic

Just Transition at school

Target and duration

Target: Trade union officers and representatives (in the education sector, but not only)

Duration: 3 h

Pedagogical objectives

1. To look back from a desired future scenario, identifying and assessing changes and actions needed to make schools “green” workplaces.
2. To identify different stakeholders and to define a possible common path.
3. To formulate trade union requests/demands related to Just Transition at school.

Contents

Steps of the activity:

1. Introduction of the topic and presentation of the activity (15 min).
2. Individual analysis of the dialogue about the ideal green school (10-15 min).
3. Work in subgroups: from the perspective of this future presented in the dialogue, look back at the current situation and critically analyse using the SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). To determine the Opportunities and Threats from the SWOT analysis, you can use the PEST-LE analysis (Political, Economic, Social, Technological - Legislative, Environment).



4. Based on the SWOT analysis carried out, now establish the path to follow and the possible milestones to be reached in your "journey" towards this desired future using a technique called "Future Radars" (take into account the stakeholders, their perspective and interests) (30 min).

Coffee break (30 min)

5. Continuation of the Working Subgroups (30 min).
6. Report back (30 min).
7. Evaluation and conclusion (30 min).

The case

Context

We are in 2032, CO₂ and greenhouse gas levels are finally going down. The schools are green workplaces that are an inspiration for society.

Characters

Dialogue between 2 teachers who are trade unionists:

- Manuel, 59 years old. Coordinator of the trade union elected in 2027.
- Maria, 31 years old. New trade unionist elected in 2030.

Manuel is focused on salaries, career, stability and work conditions. He organised some big demonstrations against the government's measures to cut salaries and jobs.

Maria tends to be more focused on environmental issues. She participated as a student in "Fridays for future" demonstrations.

Dialogue

Maria: Hello Manuel, how are you?

Manuel: Fine, and you?

Maria: I'm fine, thanks. I'm preparing one document to support meetings, and researching the transformation of schools. We are not yet in an ideal world, but now the schools are greener than 10 years ago. We have solved the asbestos problems, almost all schools produce the same amount of energy as they consume, and the curriculum is focused on environmental sustainability. What action has the trade union taken to attain the present situation?

Manuel: Oh, we started with demands about asbestos at school. Then, we worked on several Sustainable Development Goals, mainly linked with labour issues. But with increasing environmental problems like droughts and fires all society became involved and schools followed the matter.

Maria: How could the school install solar panels on almost all roofs?

Manuel: In the beginning it wasn't very easy because the solar panels are expensive. But we have shown the government that it is a long-term investment, and, with increasing energy prices, it is a good bet for the future.

Maria: What other demands has the trade union made?

Manuel: Due to energy costs we have asked for support for low carbon emission transportation, like bicycles and electric cars. Now we have a very low carbon emission society, however the problems remain almost the same: the carbon concentration in the atmosphere is still high, years of drought remain common, etc.



Maria: Yes, scientists have predicted that carbon concentration will decrease very slowly... Now we must adapt.

Manuel: We had to make alliances with parents' associations, energy cooperatives and the local authorities responsible for the buildings. But the union actively participated, contacting the various partners, establishing bridges at local and national level. And now the school buildings have been adapted, they are net-zero buildings.

Maria: Yes, but ecosystems can't make these adaptations.

Tasks

1. Read the dialogue in a group.
2. Do a SWOT analysis of the situation (see concepts and references at the end).
3. Do a PESTLE analysis (Political, Economic, Social, Technological, Legal and Environmental) for external situations (O and T).
4. What are the steps to find the way to the future?
Choose a spokesperson to present your comments and opinions in session (5 min).

Questions

1. What impression did this case make on you?
2. How do you appreciate the activity and the result obtained in your subgroup?
3. How do you think it can influence the evolution of the PEST-LE situation (or other situations, war, pandemics, etc., the path to follow and the possible milestones to be reached in your "journey" towards the desired future?
4. What other comments, questions, suggestions do you have for this activity?

Concepts and references

[Educators on a Heating Planet: Shaping Education Unions' Vision for a Just Transition \(ei-ie.org\)](#)

SWOT analysis: <https://blog.itcilo.org/the-compass/methodologies/swot-analysis/>

PEST-LE: <https://www.cipd.co.uk/knowledge/strategy/organisational-development/pestle-analysis-factsheet>

Future Radars: <https://transitionsHub.climate-kic.org/publications/visual-toolbox-for-system-innovation/> pp. 126-135



Activity sheet 5

Prospective competence

Andreas Andreou
and Daniela Decinti

Main topic

The role of trade unions in enabling the transition to a clean and circular economy while ensuring the creation of good quality jobs, and in general a fair, just and equitable transition.

Target and duration

Target: Trade officers and representatives.

Duration: 2 h

Structure of the activity

1. Introduction to the case study and the meta-competence “Prospective” (15 min).
2. The participants in the training are organised into 3-4 groups (see the video and use an ice-breaking activity to create the groups) (10 min).
3. Read the dialogue in a group (15 min).
4. Discuss within the group and use the questions at the end of the dialogue as reference to guide the debate (45 min).
5. Choose a spokesperson to present the comments and opinions in plenary (20 min, 5 per group).
6. Collect group conclusions and draw together a list of main and common elements (15 min).

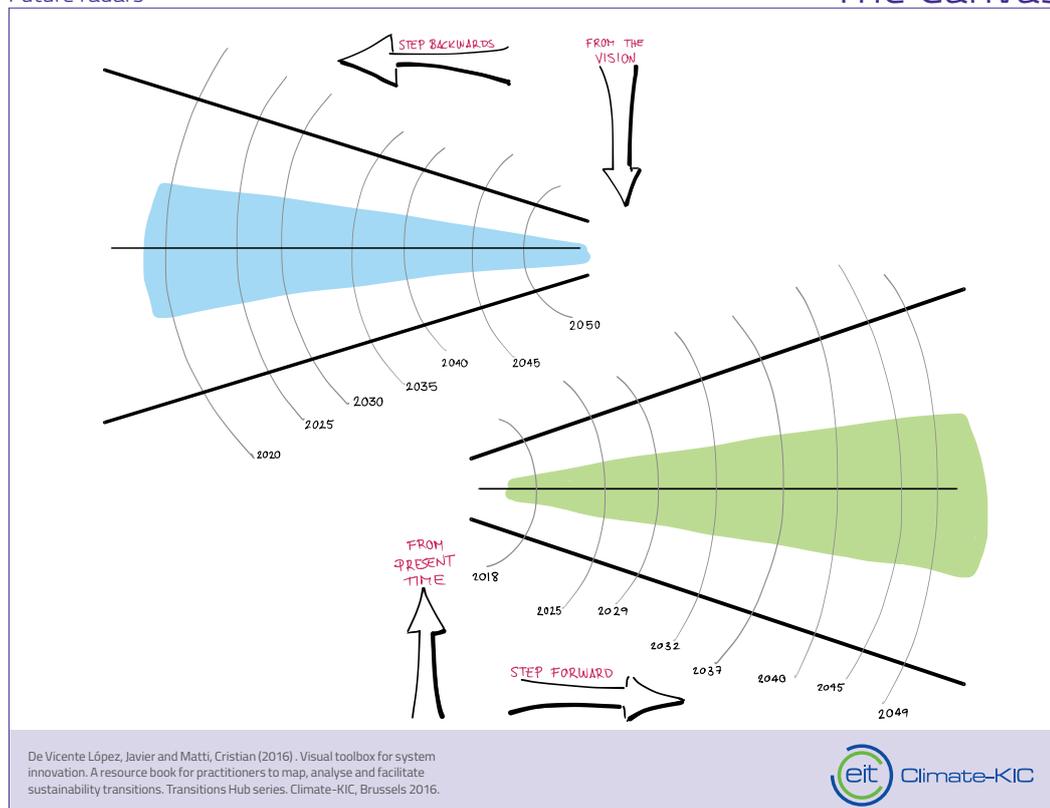


Pedagogical objectives

1. At the end of this activity, participants will be able to formulate elements of a strategic transition under a long-term and complex scenario. Participants will be familiarised with the “Future Radars” tool and be able to ascertain the key differences between visioning and backcasting. For the purposes of this case study, we will employ a technique for developing prospective competences, i.e., “future radars for visioning and backcasting”. Thus, with the use of different diagrams, we will try to make the whole process more pragmatic.
2. By applying this tool, learners will learn to plan actions equipped with a global overview of the milestones to achieve. This pathway of milestones allows participants to develop a more reliable plan, including alternatives in the case of unforeseen events. Note that the “future radars for visioning and backcasting” should be explained in plenary. This explanation is key. The picture below should be presented without the milestones because this is what trainer is waiting for from the trainees.

Future radars

The Canvas



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 135.
<https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>



The case

Context

1. The Paris Agreement is a **legally binding international treaty on climate change**. It was adopted by 196 Parties at COP 21 in Paris, on 12th December 2015 and entered into force on 4th November 2016. Its goal is to **limit global warming** to well below 2, **preferably to 1.5 Celsius degrees**, by 2030 compared to pre-industrial levels.
2. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
3. This case aims to demonstrate that under a long-term, complex and challenging environment, employees' expectations, corporate strategy and government targets can all be aligned, thus creating a shared value perspective for the future.
4. For the purposes of this case study, we want to highlight the following 3 out of the 17 Sustainable Development Goals (SDGs).
SDG 8: **Decent Work and Economic Growth** – "Goal 8 is about promoting inclusive and sustainable economic growth, employment and decent work for all."
SDG 16: **Peace, Justice and Strong Institutions** – "Goal 16 is about promoting peaceful and inclusive societies, providing access to justice for all and building effective, accountable and inclusive institutions at all levels."
SDG 17: **Partnerships for the Goals** – "Goal 17 is about strengthening the means of implementation and revitalize the Global Partnership for Sustainable Development."

Background information and character description

There are representatives from three different groups, (1) the Company, (2) the Government and (3) employee trade union representatives.

1. The Company (Ørsted)

The case uses a real-life example, the transition of Ørsted company, from being 90% dependent on fossil fuels to becoming 90% reliant on renewables. For the purposes of our case study, some facts have been adjusted.

<https://eacd-online.eu/from-90-fossil-fuels-to-90-renewables-the-orsted-transformation-story/>

2. National Determined Contributions (NDCs)

The case also introduces NDCs. California's case is shown due to its association with the company and the recently established collective agreement between Ørsted and the employee representatives.

Milestones in decarbonizing California's economy > <https://www.ethree.com/tools/pathways-model/>

3. Trade union representatives

The 3rd actor is the employee trade union representatives.

We will demonstrate the importance of effective cooperation between the company and the trade union through the following video. Their cooperation contributes towards the NDCs of California. After the video, participants will be asked to discuss as an "ice-breaking" activity.

<https://www.youtube.com/watch?v=mtC9QSgBm0c>



Dialogue

Company CEO: It is becoming clear that a business based purely on fossil fuels was not going to be sustainable, either economically or environmentally. In 2008 the EU agreed to legally binding 20-20-20 targets (a 20% reduction in CO₂ emissions, a 20% increase in renewables and a 20% improvement in energy efficiency by 2020).

The company needed to rethink, and radically. Thus, the following strategy is proposed:

- a vision statement to transform Ørsted from black to green energy in 30 years;
- to flip 85% black and 15% green energy to 85% green and 15% black by 2040;
- no new coal-fired power plants were to be built;
- capital allocation was to shift to renewable energy, specifically onshore and offshore wind turbines and solar panels.

Government representative: There will be resistance to the installation of wind turbines and solar panels onshore as people do not want to have them too near their homes or spoiling country views. As the renewables sector grows, the number of installations will increase and managing these societal and business tensions will be an ever-greater challenge.

Offshore wind mitigates some of these challenges, but the oceans and marine life still need to be protected. Could floating wind structures be an answer? They are not fixed to the seabed unlike conventional offshore wind platforms.

Company CEO: Ørsted is looking at ‘cohabitation’ solutions to minimise the impact of offshore wind farms on marine life, but this is at a very early stage. However, Ørsted considers them currently too expensive to be commercially viable, but that will no doubt change. We expect that offshore wind will gradually become one of the most competitive, with onshore wind and solar power becoming much cheaper than natural gas, coal and nuclear.

TU representative: We are worried about what it means for workers.

Company CEO: Oil and gas jobs aren’t going anywhere for years to come.

TU representative:

Leaders from business, industry, trade unions and academia to act on upskilling and training green workforce of the future. We need funding to ensure adequate training will be provided.

Government representative: The funding is a portion of a previously announced \$4.5 million commitment to support education, workforce training, and supply chain development in the state.

TU representative: What about the plans of the company regarding training?

Company CEO: The company has already established a training partnership with a high-profile education centre, and it will provide the State’s first Global Wind Organisation (GWO) training certificate programme, “The international standard for offshore wind safety training”, which provides essential safety training for workers engaged in offshore wind farm construction and operations. This is the first of a series of training courses to be provided.

TU representative: What will the training be about?

Company CEO: Workers enrolled in the programme will receive training in first aid, manual handling, fire awareness, working at heights, and sea survival.

TU representative: Are your intentions to reduce the workforce?

Company CEO: Workforce reduction might be avoided, but we will try to work on the best possible solutions.



TU representative: Is the company's intention to offer early retirement schemes?

Company CEO: Yes, we will aim for natural retirement and where there will need to be some staff reductions, we will work with the trade union representatives on generous early retirement schemes.

TU representative: The 2019 median annual wage for solar photovoltaic installers was \$44,890, according to the Bureau of Labor Statistics, while the median annual wage for wind turbine service technicians was \$52,910. Comparatively, jobs in the fossil fuel power sector pay between \$70,310 and \$81,460. Of course, wages and jobs have a range depending on the type of work being done. Someone installing solar panels on the roof of a home or residential building will likely make less than someone constructing an offshore wind turbine.

The biggest hurdle for trade workers has been the unwillingness of renewable companies to pay wages that match those offered by the fossil fuel industry. By negotiating fair salaries, we will show that companies “can pay middle-class sustaining wages with benefits via their collective bargaining agreements and still make money”.

Thus, we need to manage workers' expectation. We cannot expect that workers will be willing to shift from a high earning job to a much lower earning job. The agreement will need to take this into account and starting salaries should be at least at the same level to the one in the fossil fuel industry.

We need to sign a collective bargaining agreement to cover the sector. We need to ensure that both people in the existing industry and people to work in the new type of business will be covered by a collective agreement.

Company CEO: We care for our people, and we want to offer fair salaries.

TU representative: We need to sign an agreement that demonstrates the commitment to securing a Just Transition for workers in the energy sector. We need to show that employers and unions can work together constructively to meet the country's greatest challenges and to set an example to the rest of the renewables sector.

Company CEO: Wind power will play a critical role in securing an energy secure, net-zero future for the country and through this agreement we will ensure that the workers delivering that change have the best possible terms and conditions at work.

TU representative: Our members are fully capable of switching to building green energy components. Our members build datacentres, nuclear power plants, bridges, hospitals, you name it, we have the skill set, but we will require some training to adapt to new settings.

Company CEO: Some roles are relatively new, like wind turbine technician jobs. But in most cases, renewable energy companies are creating jobs in longstanding careers, like construction, manufacturing and logistics.

Ørsted will train workers on how to perform tasks 40 to 50 miles out at sea—and ideally provide salaries that reflect the fact that they'll be on location for 18 to 36 days at a time.

As workers are trained for the trades, the goal shouldn't be to train them for a hyper-specific job, like bolting down solar panels. Instead, the goal is to train skilled electricians, who can shift roles as the work evolves.

TU representative: But training alone isn't enough, especially for employers and policymakers who want to bring underserved groups into renewable energy jobs. Without the basic supports to succeed at work, like childcare, fair housing conditions, substance use counselling and all sorts of other social factors, it's going to be very difficult for the most vulnerable among us to hold on to these roles.



Government representative: The Government has committed hundreds of millions of dollars to creating apprenticeship and career opportunities for communities most impacted by environmental injustice, and to ensuring projects will be built with the safest and best-trained workers in the country.

A leading environmental lawmaker has proposed a bill that would create a state fund to support and retrain thousands of oil industry workers as California tries to phase out fossil fuel production.

The idea of guiding California's 112,000 oil industry workers out of their current field and into other careers is often referred to as "Just Transition," and is considered by policy researchers as a necessary step to counter job losses as the state strives to reduce greenhouse gas emissions.

But such a proposal still faces an uphill battle because it's pitting unions against unions.

Community and environmental groups say the state should start moving half the industry's workforce out of oil fields, refineries and plants now to meet California's goal of cutting 40% greenhouse gas emissions by 2030. But a union that represents a portion of these workers has opposed efforts in the past. 7 million Californians live near oil and gas wells. This bill could change that.

TU representative: We are a growing and ambitious union in renewable energy, and we are working hard to increase our membership and recognition across the sector. We want to create an example for offshore wind and other clean energy firms to follow: one where labour standards, environmental protection and good business practices can and should go hand in hand. We want a high-calibre agreement for working people and the planet reminds us that clean energy jobs can and will be well-paying, family-sustaining union jobs.

Company CEO: We acknowledge that one advantage of working with Ørsted is the company's European roots—where workers often have seats on company boards (at Ørsted, they hold three) and even have partial ownership in the companies they work for through pension investments. We want to approach you with this mentality where we not only want to win for our shareholders, but we also want to win for our employees, the people they do business with, and for the communities in which we operate.

TU representative: Our end game is to get people in the trades because our real end game is to move people out of poverty.

Tasks

1. Read the dialogue in a group.
2. Discuss within the group, to answer the questions at the end of the dialogue.
3. Choose a spokesperson to present your comments and opinions in plenary.

Tool for the trainer: "[Visual toolbox for system innovation A resource book for practitioners to map, analyse and facilitate sustainability transitions](#)" Backcasting pp. 110-111

<https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>



Questions

1. Why is the change needed?
2. Who are the key actors? What will each of them gain at the end of the transition?
3. Are there conflicting targets?
4. Is the change feasible?
5. What can each actor do to ensure funding?
6. How can policymakers be persuaded for budgets?
7. Who controls the process and who influences it?
8. What about workers salary during the transition?
9. Describe the challenges the California region is facing related to the “Just Transition”.
10. Do you think that The Just Transition Fund could play a role in incentivising the region to think long-term strategy (an outlook with a 30-year time horizon) about its transition towards sustainable energy?
11. Why do you think some trade unions are sometimes against the transition?

Define in groups the vision for the State (California) future from the point of view of all actors by using a technique called “**backcasting**”.

- Which types of projects should be funded through the Just Transition Fund?
- How to assure social dialogue and the involvement of communities affected

Concepts and references

<https://orsted.co.uk/media/newsroom/news/2022/08/orsted-prospect-agreement>

<https://aflcio.org/2022/5/6/service-solidarity-spotlight-nabtu-secures-landmark-offshore-wind-project-labor-agreement>

<https://www.vox.com/22301534/major-unions-worried-about-wind-solar-jobs>

<https://www.innosight.com/wp-content/uploads/2019/09/Innosight-Transformation-20-Final.pdf>

<https://www.innosight.com/insight/transformation-20-orsteds-move-to-offshore-wind/>

<https://youtu.be/lbt1V1YhqTw>

https://ccri.edu/marketing/news_events/2022/August/offshorewindtraining.html

<https://calmatters.org/environment/2022/10/green-energy-jobs-panel/>

<https://www.fastcompany.com/90630566/a-model-approach-to-an-equitable-transition-to-a-green-new-deal>

<https://www.nyccclc.org/news/2022-05/nabtu-orsted-sign-historic-project-labor-agreement-us-offshore-wind>

<https://calmatters.org/california-divide/2022/02/just-transition-bill-for-oil-industry-workers-exposes-labor-rift/>

<https://grist.org/climate/7-million-californians-live-near-oil-and-gas-wells-this-bill-could-change-that/>



Activity sheet 1

Competence in terms of change

Fernando Álvarez Senent
and Antonio Ingallinesi

Main topics

1. The city of Pontevedra (Spain), a benchmark for sustainable mobility.
2. Environmental risks due to high traffic density.
3. Key elements of change for sustainable mobility.

Target and duration

Target: Trade union officers and representatives

Duration: Overall duration: 3 h 30 (breaks excluded)

Structure of the activity

The trainees will receive a description of the city of Pontevedra with a picture of its city centre before its transformation. First, they will be asked to reflect on the environmental, social and economic impacts of traffic density on the population.

As part of this assignment, the concept of sustainable development in three dimensions (economic, environmental, and social) will appear. After that, they will be asked to reflect on the solutions that could be taken to reduce these impacts on the population.

Among the answers, the pedestrianisation of city centres and mobility plans will appear. Therefore, you can introduce concepts related to the implementation of sustainable measures, such as: traffic limitation in cities, mobility plans, etc.

As part of this task, the meta-competence “change” will be explained and discussed in depth, to emphasise the importance of taking measures that imply a notable change in environmental attitudes, behaviours and policies.

It is important that trainees understand that certain elements of change will have been introduced to achieve sustainability.. They are therefore asked to identify them.



Pedagogical objectives

1. To describe the environmental, social and economic characteristics of Pontevedra before it was redesigned for pedestrians.
2. To assess their impact on the population of Pontevedra.
3. To describe the key elements of change (change in environmental attitudes, behaviours and policies) to reduce high traffic density in the city of Pontevedra.

The case

Context and current situation

Pontevedra is a flat city. The municipality has 85,000 inhabitants, of which about 65,000 live in the city centre.

Pontevedra is a city, the capital of the province of the same name. Starting from a limited population size, over the past 20 years it has shown a demographic dynamism above the average for Galicia and the four Galician provinces. With an area of about 120 km², the population density of the municipality of Pontevedra was 701 inhabitants/km² in 2019, an increase compared with 1999 (626 inhabitants/km²).

Nowadays, Pontevedra is internationally known and acknowledged as “the forward-thinking Spanish city that went car-free” (<https://theculturetrip.com/>) or the “city where pedestrians have taken power” (<https://lyko.blog/>).

The transformation of the city was based on a global model, covering the whole city, not just the tourist or commercial centre.

In Pontevedra, they like to say that they didn't invent anything. Everything was in books and in experiences more or less tested in other places. Jane Jacobs and her 1961 *Life and Death of American Cities* or *The City of Children* by Francesco Tonucci, *The Neighborhood Unit* (Clarence Perry), *The Traffic Problem* (R. Jacob Smith), *Cities of Tomorrow* (Peter Hall), *Livable Streets* (Donald Appleyard).

The pedestrianisation of the historic centre was decreed. At a stroke, 500 parking spaces were eliminated. People rediscovered their city.

Subsequently, the public space was progressively reorganised, according to criteria of necessity and functionality.

Pontevedra gave up car traffic and improved the public space from the pedestrian's perspective.

Absolute priority was given to active travel: walking and cycling.

Two types of trips were encouraged as a result: so-called ‘destination traffic’ (cars going straight to the car parks) and the traffic necessary for the city to function (goods, taxis, residents, emergencies, etc.), with rules to regulate them.

The streets were transformed. Gradually, urban infrastructure was adapted to the new reality, widening pavements, establishing single platforms for the coexistence of modes, narrowing roads, eliminating traffic lights, building roundabouts, generalising universal accessibility, freeing up spaces occupied by cars to give them up in favour of their new life.

Speed was limited to 30 km/h on all urban municipal roads.

Initially there were some opposing opinions, which were overcome by a good diagnosis of the situation and by encouraging the direct participation of the neighbourhood,



with public meetings that sometimes requested even more radical steps than those proposed by the government.

Main environmental achievements:

- reduction of motor vehicle traffic. According to the City Council, between 1996 and 2014, motorised vehicles were reduced by 30.1% in the city and by 70% in the city centre;
- increase in sustainable mobility. Walking trips have increased by 67% and cycling by 5%;
- reduction in fuel consumption, estimated at 66% in the city and 88% in the city centre between 1996 and 2014, because of less motorised traffic;
- reduction of CO₂ emissions into the atmosphere, estimated at around 500 kg of CO₂ per person per year;
- improved air quality;
- increased biodiversity of tree and animal species;
- reduction of noise pollution;
- increased road safety;
- increased accessibility of public spaces, promoting an inclusive and integrating city;
- a greater plurality of services and uses of public space for citizens;
- development of local commerce, hotels and other services in the urban space previously occupied by cars;
- recovery of the city as a meeting place, reduction of conflict and improvement of citizen coexistence.

Tasks

1. Read the case of Pontevedra and look at its picture before it was redesigned for pedestrians. (<https://reasonstobecheerful.world/spains-happy-little-carless-city/>)
2. Describe the economic, social and environmental characteristics of the city before its redesign for pedestrians.
3. Assess their impact on the population of Pontevedra before its redesign for pedestrians.
4. Describe the key elements of change (change in environmental attitudes, behaviour and policies) to reduce high traffic density in the city of Pontevedra.

Questions

1. What have been the main elements of change in Pontevedra to reduce the traffic density?
2. How has the municipality overcome opposition to these changes?
3. What might the impacts of these changes (social, environmental and economic) have been?
4. What might their impact on health and local democracy have been?
5. What role can you union play in promoting sustainable urban mobility?



Concepts and references

1. Greenhouse gases
2. Global warming
<https://justtransitionnow.squarespace.com/general-causes>
3. Climate change
<https://justtransitionnow.squarespace.com/climate-mitigation-vs-adaptation>
4. Sustainable development
<https://justtransitionnow.squarespace.com/sdgs>
5. The idea of 5 meta-competences to tackle environmental issues
<https://justtransitionnow.squarespace.com/teachers#introduction>
6. Climate change and the transport sector
<https://justtransitionnow.squarespace.com/logistics>



Activity sheet 2

Competence in terms of change

Roberta Villa
and Miroslav Lacko

Main topics

1. Just Transition: strategies and experiences.
2. Key success factors of change in Just Transition cases.

Target and duration

Target: Trade union officers and representatives

Duration: 2 h

This activity highlights the key factors for a successful change process, based on real examples.

It should be scheduled in the last part of the training course.

This activity could also be linked to a presentation from an expert focusing on financing Just Transition processes or on a specific Just Transition experience in the country.

Pedagogical objectives

1. Analyse real experiences of Just Transition in Europe, identifying strengths and weaknesses of the projects.
2. Describe the key factors that made the change possible in Just Transition experiences.



Structure of the activity

1. Introduction (10 min)
2. Working Groups: analysis of real experiences (1 h)
3. Report back (20 min)
4. Discussion in plenary session: key factors that made the change possible (30 min)

The duration of each step can vary according to the number of participants.

Tasks and contents

Participants will be divided into groups (4 - 5 people each).

Option A

The trainers assign an experience to each group selected from among the European ones mapped and described by the World Resources Institute website:

<https://www.wri.org/just-transitions>

Option B

Participants are invited to choose one of the European experiences from among the ones mapped and described by the World Resources Institute (<https://www.wri.org/just-transitions>).

Task option A

“Read the case study assigned to you by the trainers.

Discuss within the group to answer the following questions:

- the text identifies the strengths and weaknesses of the project. Do you agree with this analysis? Can you identify any other strengths and/or weaknesses, from a trade union perspective?
- what, in your opinion, are the key factors that made the change possible? Please list them on a flipchart;
- do you know of any other Just Transition experiences in your country? What are the key factors that made the change possible? What have the main challenges and obstacles been? Please list the experiences you know (maximum 3) and the key success factors/challenges on a flipchart.

Choose a spokesperson to present the results of your analysis.”

Task option B

“Choose one of the European cases mapped and described by the World Resources Institute website.

Read the case study you have chosen.

Discuss within the group to answer the following questions:

- The text identifies the strengths and weaknesses of the project. Do you agree with this analysis? Can you identify any other strengths and/or weaknesses, from a trade union perspective?
- What, in your opinion, are the key factors that made the change possible? Please list them on a flipchart.
- Do you know of any other Just Transition experiences in your country? What are the key factors that made the change possible? What have the main challenges and

obstacles been? Please list the experiences you know (maximum 3) and the key success factors/challenges on a flipchart.

Choose a spokesperson to present the findings of your analysis.”

Concepts and references

Just Transition: Frequently Asked Questions and Guidelines (ILO)

https://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang--en/index.htm

Just Transition Fund (EU)

https://ec.europa.eu/regional_policy/en/funding/jtf/

The territorial Just Transition Plans (EU)

https://ec.europa.eu/regional_policy/en/information/publications/communications/2021/the-territorial-just-transition-plans

Climate Change FACTS - Economy and Financing (ONU)

<https://www.un.org/en/climatechange/science/key-findings>

Examples of Just Transition Processes:

1. The World Benchmarking Alliance
<https://www.worldbenchmarkingalliance.org/>
2. ILO - Actions toward a low-carbon economy
<https://www.climateaction4jobs.org/action/>
3. World Resources Institute
<https://www.wri.org/our-work>

Key factors in Just Transition Processes (article on WRI website)

<https://www.wri.org/insights/growing-momentum-just-transition-5-success-stories-and-new-commitments-tackle-inequality>





Activity sheet 3

Competence in terms of change

Javier Vaquero and Laura Weber

Main topic

This case study is organised as a classroom activity for a face-to-face course about the green competences of change, trying to identify the situations in the past that created (business model, tech innovation, new products, breakthroughs) that made the situation to evolve to a certain point.

This activity sheet represents a case of the “reshoring” or “nearshoring” process. “Reshoring” is the relocation of previously offshored value chain activities (particularly: production; sourcing; research and development; services) back to the EU”
<https://reshoring.eurofound.europa.eu/>

Target and duration

Target: Trade union officers and representatives

Duration: from 2 h to 2 h 30

Structure of the activity

1. Introductory activity

The participants in the training are organised into 3-4 groups (“ice-breaking” activity or another way to create the groups) (15-20 min).

2. Main activity

Show the groups of participants the current situation of Orbea Bikes and propose that they apply the “trajectories of change” methodology (1 h – 1 h 30).

3. Last activity for unionist

Ask the groups of participants to introduce their vision and answer questions (45 min to 1 h).



Pedagogical objectives

1. To apply the “Just Transition” from the trade union point of view for the situations that would be identified.
2. To analyse the changes (business model, tech innovation, new products, breakthroughs, etc.) introduced by a company wanting to reshore or nearshore its activities.
3. To explain the roles and actions trade unions could play to contribute to the reshoring or nearshoring process.

The case

Context and current situation

Orbea is a company that manufactures bikes (road, mountain and electric), located in the Basque Country in the north of Spain.

Orbea’s turnover exceeded 200 million euros and it had 700 employees in 2020 after growing by 22%.

The Basque bicycle manufacturer increased its turnover for the past six years, after starting a transformation plan in 2015 to boost its brand.

Orbea is taking advantage of the cycling boom after the Covid-19 crisis and the transformation process of the past five years. The Basque company, owned by the Mondragon Cooperative, ended the 2020 financial year with a turnover of more than 200 million euros and a workforce of 700 people.

As Jon Fernández, Orbea's CEO, explained this morning at the Matins Esade cycle of meetings, organised by the Esade business school, the company ended the 2020 financial year with growth of 22%.

This percentage is in addition to the 32% recorded in 2019 compared with 2018, when its turnover stood at 127.5 million euros, according to the latest figures reported by the company.

With the increase in sales recorded in 2020, the company, which in one year has increased its workforce by 35%, accumulated six years of growth, with increases of 29% in 2018 and 19% in 2017, the executive forecast for the 2021 financial year is to repeat the positive trend in 2021, with a 30% increase.

Fernández, at the helm of the company since 2011 (although he had previously worked in departments such as human resources, purchasing and sales), stressed that “the current growth is not due to the pandemic and the boom” of the bicycle and electric mobility, but is the result of the transformation that Orbea began in 2015, focusing on the commitment to the brand.

In 2015, when Orbea began its transformation process, the company had a turnover of around €70 million, although it was competing with global brands with a turnover of more than €1 billion. At that time, we were too big to compete in the niche market and too small for the big guys,” said the executive, “and the decision was clear: be big.”

Orbea, founded in 1840, has focused over the past five years on developing a strategy based on brand reputation and with an omnichannel distribution model. “The driver of this stage has become the brand,” said Fernández. “We have become a brand-driven company because we are convinced that the brand generates differential elements.”

Of the company's total turnover, only 20% comes from the Spanish market. The remaining 80% is concentrated in Europe and the United States because “Orbea needs



mature markets, with a broad social middle class,” the executive explained, although he specified that “not only in terms of purchase volume, but also in terms of values.”

Headquartered in Mallabia (Vizcaya), the company centralises the manufacture of its own brand in its plan for the Basque Country and in Portugal, although some of the components come from Asia. The company is committed to vertical integration and controls processes such as assembly and painting, although it outsources the production of elements such as frames and rims.

Although highly identified with road bikes, Orbea derives 65% of its turnover from mountain bikes. The company has also ridden the wave of electric mobility and at the end of 2020, these products accounted for 30% of total business, a percentage that rose to 40% in the first quarter of 2021.

Previous changes

Situation in 2015

Orbea stops producing bicycles in China to boost its factories in Spain and Portugal.

Orbea also opts to relocate its production. The Basque bicycle company decides to stop manufacturing at its plant in Kunshan (China) as of 30 June, with the aim of "increasing and strengthening our assembly capacity" at its facilities in Aveiro (Portugal), where some 40 people currently work. This complex will be extended by an 8,000 square metre warehouse, although it is not known whether this will lead to an increase in the workforce.

The cooperative will also boost its centre in Mallabia (Vizcaya), where it has a base where 170 people work. “Customisation capacity will be increased, both in terms of paints and component options,” the company says. All these changes in the production phase, according to Orbea, respond to the need to give priority to "speed, flexibility and customisation" of its products.

More and more customers are opting not to buy a standard bicycle, but to customise one according to their needs, a trend that Orbea already addressed through its online purchasing system. However, delivery times were lengthy compared with some of its competitors because Orbea needed to manufacture the bikes in China.

Situation in 2017

Orbea invests €6 million in new production lines for its Vizcaya factory.

The Basque bicycle brand plans to increase its workforce at the Mallabia facilities, where 271 people are employed. This year they will exceed 100 million in revenue, 20% more than in 2016.

Situation in 2019

The company establishes its purpose as the “cooperative manner for managing business and becoming part of the change through bike mobility”.



Tasks

1. Introductory activity

The participants in the training are organised into 3-4 groups (“ice-breaking” activity or a way to create the groups).

The trainer presents the situation of the Orbea Bikes in 2015, with very little data:

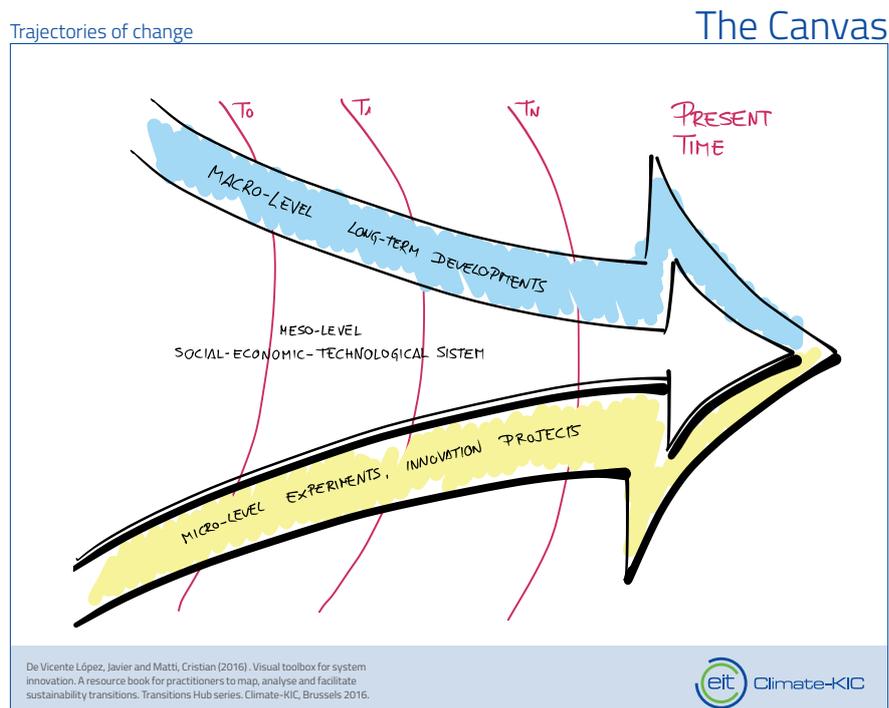
- in 2015, the company was producing bikes in China and was dealing with the consequences of the “subprime” crisis;
- the company decided to “reshore” production to the Basque Country.

Question to the participants: **What do you think has happened to Orbea during the past 6 years?**

2. Main activity

Show the groups of participants the current situation of Orbea Bikes and propose that they apply the “trajectories of change” methodology in three steps:

- searching for information about the trajectory of Orbea Bikes over the past 6 years (the trainer could share some links from the context of the activity);
- identification of “drivers of change” or “changing factors” that affected the development of the company, including social changes and their relations;
- development and presentation of the arrow of trajectories from every group.



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 85.
<https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>



Examples of other social drivers of change – changing factors:

- revision of personal values in the new generations (less pollution and a positive image of the connection with nature);
- reduction of the importance of the car in mobility and change in the planning of cities and towns;
- more use of bikes for sustainable mobility;
- new customers with an appreciation of the bicycle as a real vehicle and an acceptance of higher costs for the purchase and use of bicycles (clothing, accessories, etc.);
- Covid-19 pandemic.

Tool for the trainer:

Visual toolbox for system innovation A resource book for practitioners to map, analyse and facilitate sustainability transitions, pp. 78-85

<https://transitionsclub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>

3. Last activity

The final activity is a proposal for the groups of participants to introduce their vision and answer the questions (below).

The opinions and assessments of the debate can be collected on a blackboard and used to draw conclusions on trade union action to be taken in companies implementing Just Transition.

Questions

1. What do you think has happened to Orbea over the past 6 years?
2. Are the changes introduced by Orbea Bikes favourable to workers, the local community and the environment, beyond the increase of jobs in the company? Explain.
3. If so, how could unions contribute to positive changes within the company?

Concepts and references

ORBEA bikes (Bizkaia – Spain)

<https://www.orbea.com/si-sl/>

<https://www.orbea.com/gb-en/>

<https://stories.orbea.com/en/orbea-50th-year-as-a-co-op-2/> (cooperative)

<https://www.linkedin.com/company/orbea-s-coop->

<https://www.mondragon-corporation.com/wp-content/uploads/docs/MONDRAGON-dossier-prensa-ES.pdf> (Corporación Mondragón cooperative of cooperatives)

The change of ORBEA

<https://www.palco23.com/equipamiento/orbea-rebasa-los-200-millones-de-euros-y-los-700-empleados-en-2020-tras-crecer-un-22>

<https://www.palco23.com/equipamiento/orbea-deja-de-producir-bicis-en-china-para-potenciar-sus-fabricas-de-espana-y-portugal/>

<https://stories.orbea.com/en/orbea-revolution-designing-the-future/>



<https://www.palco23.com/equipamiento/orbea-invertira-seis-millones-en-nuevas-lineas-de-produccion-para-su-fabrica-de-vizcaya>

The context

https://www.abc.es/economia/abci-fabricas-fueron-espana-crisis-regresan-calor-bajos-salarios-201909220224_noticia.html?ref=https%3A%2F%2Fwww.abc.es%2Feconomia%2Fabci-fabricas-fueron-espana-crisis-regresan-calor-bajos-salarios-201909220224_noticia.html (reshoring)

<https://www.emprendedores.es/gestion/relocalizacion-pymes-espanolas/> (reshoring)

<https://www.orbea.com/es-es/> (personalization of bikes)

<https://www.palco23.com/equipamiento/las-bicicletas-made-in-spain-lo-apuestan-todo-a-la-personalizacion-para-combatir-a-las-firmas-extranjeras> (personalization of bikes)

A decorative graphic on the left side of the page features a grid of white paper boats. A dotted line starts from the bottom right of this grid and points towards a single red paper boat that is positioned higher and further to the right, symbolizing a path or transition.

Activity sheet 4

Competence in terms of change

Ivelina Hubenova
and Pasquale Pignatale

Main topics

1. Just Transition strategy in the metal industry.
2. Trying to identify the situations in the past that created changes that caused the situation to evolve to a certain point.
3. Integrating a sense of responsibility and accompanying the necessary changes and proposals contributing to the common good.

Target and duration

Target: Trade union officers and representatives

Duration: 2 h 30

Structure of the activity

This activity works on competence in terms of change and highlights the key factors based on real examples.

1. Brief introduction on the context and objectives of the activity (20 min).
2. Work in a subgroup (1 h 30).
3. Report back (20 min).
4. Comments and conclusion (20 min).



Pedagogical objectives

1. To highlight the key value of Just Transition in the metal industry.
2. To identify and analyse factors (changes/non-changes) introduced by a company and how they have affected all stakeholders concerned.
3. To reflect on social responsibility.

Contents and tasks

1. Introduction to the context and objectives of the activity (20 min)

During the introduction, the trainers will explain and present information about the demand for a Just Transition in the steel industry.

Depending on the number of participants, the trainer will create working groups (min. 3 persons per group).

2. Work in subgroups (1 h 30)

Step 1: Read the Taranto Steel Factory case.

Take a large piece of paper and sketch out the canvas. Use Template 1.

Note: The big arrow depicts the evolution of the whole system, including the three levels (macro/meso/micro), encompassing the changes that have happened and relations or feedback loops between levels.

Use these definitions for macro/meso/micro levels

Macro-level: Landscapes. Exogenous, autonomous, long-term trends and crises (demographic, environmental, macro-economic, macro-political, etc.)

Meso-level: Regimes. Established, mainstream practices, structures and culture (rules and regulation, infrastructure, economic structures, technological lock-ins, incumbent stakeholders, behaviour, etc.)

Micro-level: Niches. The 'incubation rooms' for radical innovations, shielding them from the mainstream. Niches may take the form of innovation projects or experiments in small-scale 'places' that are deviant from business as usual, etc.

Step 2: Identify the factors or areas of resistance that have driven the positive or negative outcomes at different levels /micro, macro, meso/ that were significant for the system at a certain moment.

The starting point is 2012. Start moving forward to the present day. Describe challenges faced by the Just Transition Plan and Green Deal.

Note: Factors may be technological innovation, new financial arrangements, different social organisations, new business models, wrong decisions, etc.

Use different coloured post-it for each of the levels:

- micro-level - green colour;
- macro-level - blue colour;
- meso-level - pink colour.



Step 3: Identifying relations and trajectories.

After identifying the events, you need to relate them to each other, so that they can depict the changes that have been driven.

As if it were a game of “joining the dots”, draw an arrow linking those related events. Use a different colour depending on the levels they are linking.

Note: Bear in mind that these relations may be within the same level and between levels.

3. Report back (20 min)

Choose a spokesperson to present the group work in the plenary (5 min per group)

4. Comments and conclusion (20 min)

The case - Taranto Steel Factory

Current situation

The steel company in Taranto was founded in 1965. It became an Italian steel company that, for much of the 20th century, was Italy's largest steel producer and one of the largest in Europe.

It can produce 10 million tons of steel annually, which corresponds to 40% of Italian steel production. Produce steel profile, pipe, strip, plate and corrugated sheets. Most of the steel produced by the plant is exported to Africa, Asia, Europe, Latin America, and North America.

The factory provides work for about 20,000 people.

Revenues from sales increased from 1,619 million euros in 2020 to 3,387 million euros in 2021, an increase of 109.2%. The increase in turnover is attributable to the 11.8% increase in quantity deliveries, the improvement in the product mix and the growing price trend of the main raw materials.

The national recovery plan is designed to help many companies to tackle the Covid crisis. The aim is to strengthen the competitiveness of the Italian production system in the post-pandemic recovery phase by focusing on increasing the rate of digitalisation, technological innovation and internationalisation.

Maintaining primary steel production in the decarbonisation process is an important commitment to the development of the national economy. The transition is already happening. The pandemic, the war in Ukraine and the energy price crisis are all accelerating the pace of change. Combined with the twin green and digital transitions, it has accelerated change in many sectors, and fundamentally changed our industries and workplaces.

A Just Transition is not free, but the costs of poorly managed transitions are much higher for individuals, regions and society at large. Reaching climate targets in a fair and inclusive manner requires higher public spending, but potentially delivers long-term savings to society.

The management of the plant took measures in this direction. They started work with Eni Rewind that provides environmental design services as part of the renovation process underway at the Taranto site. Intervention in water tables and soils that they are designing will contribute to the completion of the itinerary of environmental rehabilitation that the Taranto plant has undertaken for several years.

It is a three-phase process. The first phase concerns scouting the environmental situation, data collection and inspection of soils and water tables. The second is



devoted to the analysis of the remaining and potential risks, both for people and the environment itself. Once these evaluations are made, it will be possible to intervene on the risk factors and plan targeted environmental interventions.

It is indeed a journey with a high degree of innovation, in which digitalisation plays a central role. A 3D modelling of the subsoil conditions is the first and fundamental starting point of any activity of this type. The analysis process starts from examining the soil conformation, its components and the permeability of the different layers, down to the water table. It's a TAC find on the subsoil: it allows us to understand what type of contamination is in there, what concentration and mobility. From here, the design of the interventions has the goal of giving these areas new life.

The process aims to contribute to the creation of a circular economy, including regarding the consumption of water and soil: circularity is a very important and current issue. For example, to the water table treatment that, once decontaminated, we can give back to the production cycle, reducing the water consumption from other sources.

Situation in 2012

In 2012, an investigation for environmental crimes and pollution led the Taranto prosecutor to order the seizure without the right to use the plants in the furnace area.

The factory emitted over 4,000 tons of dust, 11,000 tons of nitrogen dioxide, 11,300 tons of sulphur dioxide, 7.0 tons of hydrochloric acid, 1.3 tons of benzene, 150 kg of Polycyclic Aromatic Hydrocarbons (PAH), 52.5 g of benzo(a)pyrene, 14.9 g of organic compounds, polychlorinated dibenzo-p-dioxins.

To safeguard the establishment and employment, the Italian government initiated the company administrator procedure and launched an international tender for an assignment of the same. Italy placed the Steel factory Under Special Administration after a widening environmental probe put Europe's largest steel plant at risk.

The closure of the steelmaker would be "an enormous shock" for the whole Italian economy, even in terms of jobs.

Non-profit green organisations drew attention to the problem. They insisted the company and the state take action leading to zero pollution to prevent not only environmental degradation but also severe social inequalities that lead to areas of the world where rights, such as the right to health, are compromised precisely because of environmental degradation and the availability of contaminated sites in disadvantaged communities.

Situation in 2016

The chimneys of Europe's biggest steel plant dominate the skyline as its furnaces dominate the local economy. On an average day, the plant churns out 13,000 tons of steel and loses about 1 million euros (\$1.2 million).

The government-controlled plant ran out of cash, threatening the livelihoods of a quarter of the families in this city of 200,000. That's why a larger company absorbed the factory. The new company promised to put €2.4 billion into the plant's modernisation and environmental clean-up. And it agreed to maintain 10,700 jobs for five years, or to pay a major chunk of those salaries and big fines for any worker laid off.

The government's willingness to grant immunity over the environmental problems was at the centre of the deal.

But things had not gone well.

The global steel market tanked, the local authorities seized a pier critical for importing raw materials after strong winds blew over a crane and killed a worker, and the factory



has produced only 4.5 million tons of steel this year, much less than the amount needed to turn a profit.

Civic associations that unite factory workers, unemployed, insecure workers, students, professionals and citizens demand that those who generated this drama pay for the disaster they produced. They no longer want to pay with their lives and bodies for the consequences of an ecological, economic and social crisis for which the culprits are known.

They insist on the closure of all polluting sources and the consequent Reclamation, Decontamination of sites and the Economic Reconversion of the territory through the reuse of the entire workforce.

Situation in 2020

In 2020, the process of returning to commissioners' management and ownership of the Italian state began, under the protection of the penal shield. Implementing all the modernisation procedures and environmental sustainability of the Taranto plant would continue.

The closing of steelworks would be worth about 1.4 per cent of Italy's entire economic output. A sprawling, 15 square kilometre plant, it is the largest factory in the country's economically depressed south. If it closes, more than 10,500 workers could lose their jobs in a region that already suffers from dizzying unemployment, especially among the young.

Businesspeople fear that foreign investors would steer clear of Italy. And the country could be saddled with a toxic ghost town, with pollutants seeping into the ground and surrounding sea.

In response to the Covid-19 pandemic's impact on demand, European steelmakers have swiftly reduced supply. With a raft of blast furnace capacity taken offline, EU-28 iron ore demand contracted by 10% in 2020.

In 2020, the factory produced 3.4 million tons of steel. 82% is recycled steel, produced by melting mainly ferrous scrap in electric arc furnaces (EAF); 18% is primary steel, i.e., steel produced by full cycle from iron, emitting 8.3 million tons of CO₂ into the atmosphere. In addition to greenhouse gases, several pollutants are also emitted, including dust, dioxins, and polycyclic aromatic hydrocarbons (some of which are potentially carcinogenic), mainly from processing coal and using its derivatives.

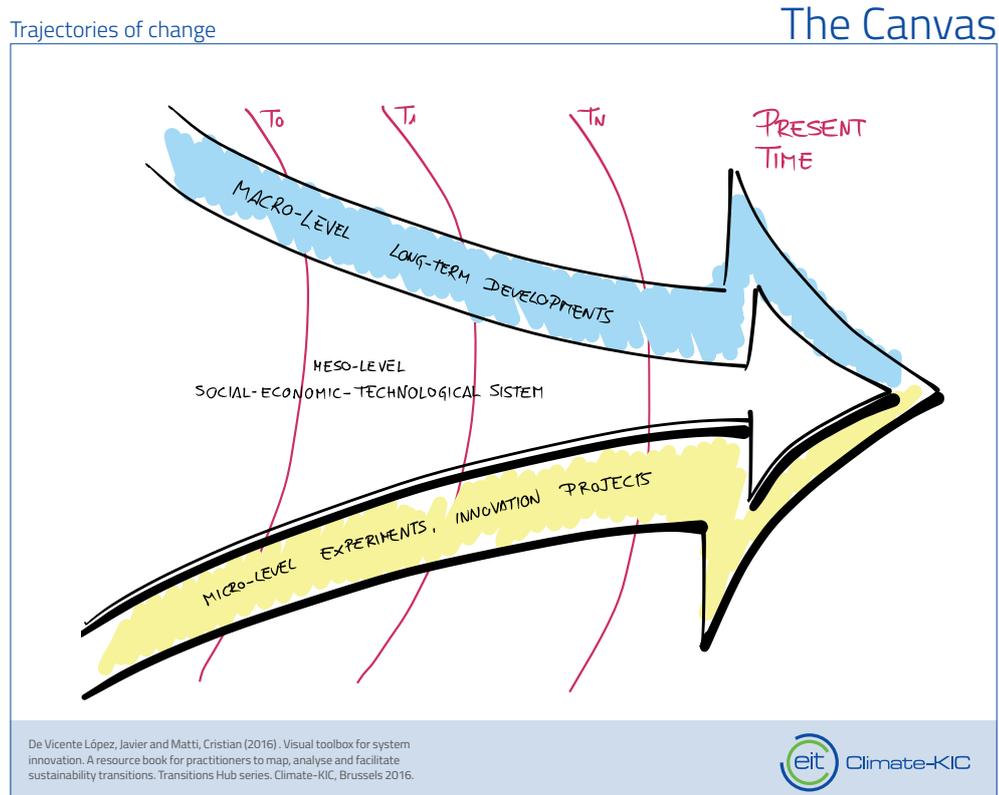
The conversion of the Taranto plant from coal-fired blast furnaces to natural gas-fired DRI (direct reduced iron) is estimated to require an investment of 2.5 billion euros, fostering an immediate benefit in environmental terms and keeping the quality of the final product unchanged.

The end point of the complete conversion involves the use of green hydrogen. Although currently technologies for hydrogen production and storage are not yet sufficiently developed and still have too high costs, they are expected to decrease significantly in 2030 (from 8.2 – 8.9 to 5.5 – 6.2 billion euros). This is why public investment must be directed toward the DRI option and hinged on a long-term national strategy. In fact, it is the only viable way to achieve climate neutrality goals.

From the employment point of view, the reduced labour requirements of the system formed by pre-reduction and the electric steel mill (DRI and EAF) can be offset and diversified through coordinated development of alternative employment outlets, such as those in the green hydrogen and renewable energy supply chains, as well as with the expansion of the site's in-house steel finishing facilities.



Template 1



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 85.
<https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>

Concepts and references

European Green Deal

Just Transition - a necessary component of the new industrial revolution

[Just transition a necessary component of the new industrial revolution | UNECE](#)

ONU report - The right to a clean, healthy and sustainable environment

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G22/004/48/PDF/G2200448.pdf?OpenElement>

European Green Deal

[A European Green Deal | European Commission \(europa.eu\)](#)

[A Just Transition Manifesto to save the Green Deal – EURACTIV.com](#)

National Recovery and Resilience Plan

<https://www.mise.gov.it/index.php/it/pnrr>



Acciaierie d'Italia and Eni Rewind: technologies for the circular economy

[Acciaierie d'Italia and Eni Rewind: technologies for the circular economy | EN](https://www.eni.com/en/energy-transition/industry/acciaierie-d-italia-and-eni-rewind-technologies-for-the-circular-economy)
([acciaierieditalia.com](https://www.acciaierieditalia.com))

Taranto, primary steel production in the decarbonisation challenge

[Taranto, primary steel production in the decarbonization challenge - ECCO](https://www.eccoclimate.org/en/primary-steel-production-in-the-decarbonization-challenge) (eccoclimate.org)



Activity sheet 5

Competence in terms of change

Plamena Parteniotis, Lilyana
Laskova and Radu Stochita

Main topic

Digitalisation and green transformations are changing the public transport sector immensely. The adoption of new digital technologies and processes is accelerating and becoming even more widespread.

This activity is about the role of trade unions in creating (green) quality jobs, developing specific sectors, and ensuring education and skills for new/green jobs.

Target and duration

Target: Trade union officers and representatives

Duration: 2 h 40

Structure of the activity

Stage 1

1. Introduction to the case study, meta-competence “Change” and the Tool “Trajectories of change” (20 min).
2. Dividing into small groups, each group has to create a “Trajectories of change” canvas based on the main issue (30 min).
3. Choose a spokesperson to present the ideas based on the canvas developed in the plenary (15 min).



Stage 2

4. Based on the different canvas, divide again into groups. Each group has to develop a SWOT Analysis (30 min) to explore all aspects of changes.
5. Choose a spokesperson to present the results of the SWOT in the plenary (15 min).

Stage 3

6. Based on the different SWOT analyses, divide again into groups. Each group has to develop a trade union communication strategy for more awareness (30 min).
7. Choose a spokesperson to present the results of the SWOT in the plenary (15 min).
8. Conclusions and debriefing (5 min).

Pedagogical objectives

At the end of this activity, participants will be able:

1. To formulate elements of Change Competence for realising a real Just Transition that protects the regions' workers.
2. To reflect on the social importance of trade unions, in terms of change competence and labour transformation as an impact of green transition and digitalisation.
3. To develop a canvas "Trajectories of change" for a better understanding of the evolution in the case study.
4. To create a trade union communication strategy considering all transformations and changes in terms of Just Transition and all the following consequences for the workers and society.

The case

In 2019, the local council in Vienna launched an **autonomous bus line**. According to their project:

The goal is to **sustainably increase the efficiency and operational safety of autonomous vehicles**, with the ultimate goal of operating a bus line in Seestadt under real conditions – with stops, timetables, and real passengers.

The call for safety is often invoked by tech entrepreneurs who want to sell us driverless vehicles, presenting them as flawless. The Vienna driverless bus collided with a pedestrian in 2021; in 2022, a driverless truck veered left, cut across a highway, and slammed into a concrete wall. When these errors happen, the companies blame it on human error or on pedestrians.

The driverless bus company in Vienna has been pushing for **cost-saving operations**, saying that cutting personnel would be a way to offer public services at a more affordable rate. In this process, the drivers, the ticket handlers, or the inspectors will lose their job, being told that they can be replaced with robots.

The local government, regardless of the accident, has been contemplating expanding the line, saying that we must move towards greener sources of transport. The buses in the city are old, run on diesel and leave a thick cloud of dark smoke whenever leaving the stations. Environmental groups, businesses and citizens are calling for a greener society. The public authorities have taken it a step further and instead of implementing electric vehicles, they have introduced self-driving ones.



Trade unions are in talks with an action-oriented local group that wants to fight against the introduction of self-driving buses. They disagree with the company and the way in which the buses were built. They were produced in Indonesia, where forced labour was used, and multiple cases reached the press. The action-oriented group mentions that an environmental association wants to push against the introduction of buses and has 200 people ready to rally in the streets.

As a compromise solution, the trade unions have proposed a prequalification process for bus drivers. This proposal has been on the table for some time with no concrete decision taken. The prequalification, according to the trade unions, is a solid approach to save jobs and provide decent working conditions for those impacted by the change.

Questions and tasks

1. Using the tool, “Trajectories of change”, try to describe the transformations and changes in the business processes in the Vienna Public transport system.
2. Use SWOT analysis for identifying the challenges and positives of the prequalification process for the trade union members.
3. Given the government’s commitment to replacing the old buses with modern, electric ones, what can unions do to protect the working people regarding the significant change in business processes?
4. How can cooperation with the organisations (NGOs, citizens’ groups) influence better decent working conditions for the workers?
5. Make a trade union communication strategy for more awareness.

Concepts and references

How Digital Transformation is reshaping Public Transport

<https://www.it-trans.org/en/about/digital-transformation/>

[Futurism] Driverless Bus Collides with Pedestrian in Vienna (<https://futurism.com/the-byte/driverless-bus-collides-pedestrian-vienna>)

[AIT] Auto.bus - Seestadt (<https://www.ait.ac.at/en/research-topics/integrated-mobility-systems/projects/autobus-seestadt>)

[WSJ] Self-driving truck accident draws attention to safety at TuSimple (<https://www.wsj.com/articles/self-driving-truck-accident-draws-attention-to-safety-at-tusimple-11659346202>)

[MarketResearch Telecast] Autonomous buses are not proving their worth in Vienna (<https://marketresearchtelecast.com/autonomous-buses-are-not-proving-their-worth-in-vienna/90046/>)

Visual toolbox for system innovation A resource book for practitioners to map, analyse and facilitate sustainability transitions, pp. 78-85

<https://transitionshub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>

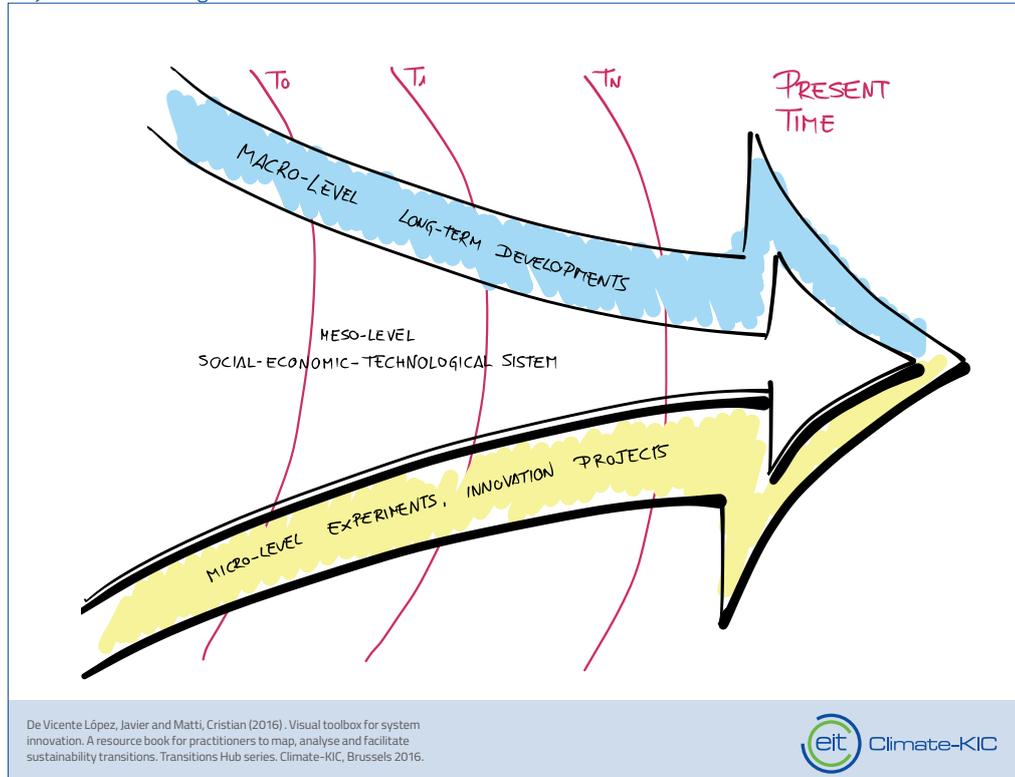


The “Vienna Model”: 365 Days of Unlimited Public Mobility:

<https://www.climateactionstories.com/mobility/the-vienna-model-365-days-of-unlimited-public-mobility>

Trajectories of change

The Canvas



Source: De Vicente López J. and Matti C. (2016) Visual toolbox for system innovation: a resource book for practitioners to map, analyse and facilitate sustainability transitions, EIT Climate KIC, p. 85.
<https://transitionsHub.climate-kic.org/publications/visual-toolbox-for-system-innovation/>



Activity sheet 6

Competence in terms of change

Andreas Andreou
and Daniela Decinti

Main topic

This activity is organised as a classroom activity for a face-to-face course about the green competence of change, trying to identify the situations and factors in the past that created changes to the business model, including but not limited to tech innovation, new products and shareholder structural changes in order to enable it to transition to a more sustainable company.

This activity is about the transition of Ørsted company from being 90% dependent on fossil fuels to becoming 90% reliant on renewables.

Target and duration

Target: Trade union officers and representatives.

Duration: 3 h 30

Structure of the activity

1. Introductory activity - “Ice-breaking” activity (30 min).
2. Main activity – Part A (1 h).
3. Break (30 min).
4. Main activity – Part B (1 h).
5. Last activity – Part A (30 min).
6. Break (30 min).
7. Last activity – Part B (30 min).



Pedagogical objectives

At the end of this activity, participants will be able:

- to formulate elements of a strategic transition under a long-term and complex scenario;
- to know the roles and actions trade unions could play to contribute to the transformation of the company;
- to find the key factors that made the change towards the green transition possible.

The case

Context

Ørsted (formerly DONG Energy) is a renewable-focused, energy company based in Denmark. The Ørsted vision is a world that runs entirely on green energy. Ørsted develops, constructs and operates offshore wind farms, bioenergy plants and innovative waste-to-energy solutions and provides smart-energy products to its customers. With over 5,800 employees across Denmark, Sweden, the UK, Germany and the Netherlands, Ørsted is also expanding its offshore wind business to *the US* and *Taiwan*.

Tasks

1. Introductory activity - “Ice-breaking” activity (30 min)

Two short videos of 3 minutes and 1 minute will be presented to the participants in plenary. <https://youtu.be/9JJS5JlvnHo>

<https://youtu.be/yzDbPtVmnWo>

- Then, all participants will gather in a circle and be provided with a ball. Each participant will tell which keyword he or she highlighted and then pass the ball to the next participant who in his/her turn says the word and passes the ball to the next participant.
- It does not matter if participants have the same keywords.
- Trainers will write the keywords on the flipchart.

2. Main activity – Part A (1 h)

The participants are organised into 3 groups, and they will be provided with reference material (selected extracts from the company’s financial statements, articles from different media, and video links). The participants, based on the information provided, will be asked to present the “trajectories of change” methodology (45 min) after the trainers have explained it (15 min).

3. Break (30 min)

4. Main activity – Part B (1 h)

- Each group will then present in the plenary their findings (30 min, 10 min for each group).
- At the end, in a plenary, participants will reflect on each other’s presentation (15 min).
- The trainers will present the key takeaways identified by the company (see the context) (15 min).



5. Last activity

- The final activity is a proposal for the groups of participants to introduce their unionist vision and answer the questions below.
- The final activity is broken down into two 2 parts, part A and part B.

a. Last activity – Part A (30 min)

The group discuss together.

6. Break (30 min)

b. Last activity – Part B (30 min)

A spokesperson will report the reflections of the group (10 min each).

Questions

1. Why is the change needed?
2. Who are the key actors? What will each of them gain at the end of the transition?
3. Are there conflicting targets?
4. Is the change feasible?
5. What can each actor (employees, employers) do to ensure the transition's funding?
6. How can policymakers be persuaded for subsidies?

Concepts and references

[Visual toolbox for system innovation - Transitions Hub \(climate-kic.org\)](#) pp. 78-85

Celebration of electromagnetism – Thank you H. C. Ørsted

<https://youtu.be/9JJS5IvnHo>

About our name. From magnetism to offshore wind turbines

<https://orsted.co.uk/about-us/our-company/our-name-change>

Why Ørsted? Our Name Change

<https://youtu.be/yzDbPtVmnWo>

Our green transformation

<https://youtu.be/N0jja0TrzQ4>

A tale of transformation: the Danish company that went from black to green energy

<https://www.corporateknights.com/clean-technology/black-green-energy/>

Book extract: Case study – Ørsted

<https://competentboards.com/book-extract-case-study-orsted/>

From Dong to Orsted: A Leading Utility's Green Energy Transition What Indian Firms Can Learn from Such a Transition

https://ieefa.org/wp-content/uploads/2021/09/Orsted_A-Leading-Utilitys-Green-Energy-Transition_September-2021.pdf

Ørsted's Move to Offshore Wind: An Interview with Thomas Brostrøm

<https://youtu.be/Ibt1V1YhqTw>



Activity sheet 1

Collective competence

Javier Vaquero and Laura Weber

Main topic

1. Collaboration between trade unions and environmental NGOs

Target and duration

Target: Trade union officers and representatives

Duration: 2 h 15

Structure of the activity

1. Introduction to the Collective competence and a short presentation of the case study and the activity (15 min).
2. Work in groups of 3-5 participants:
 - if the group members don't know each other yet, add an ice-breaking activity or an introduction round (5-15 min);
 - the participants read the case as a group and discuss the questions (30 min);
 - each group prepares a short presentation of their findings, using the additional references, personal experiences or examples from their country/working environment (45 min);
 - each group decides on a speaker.
3. Report back - round table: all speakers take the floor at the same time; each speaker has 3 minutes to present the group's findings. After the presentation, the discussion develops (a round table of speakers) with questions from the 'audience' (the other participants, tutors or experts) (30 min).



Pedagogical objectives

1. Familiarise yourself with the collective competence.
2. Reflect on the role of trade union in environmental issues (and other topics).
3. Discuss trade union values and trade union strategies towards social responsibility and environmental issues.
4. Discover possibilities for the trade union to connect with other organisations, NGOs, etc.

The case

Context and character

Additional context: In its most significant environmental mobilisation so far, civil society in Slovenia has managed to secure a referendum on the contested Water Act by collecting more than 50 000 certified signatures of citizens demanding a referendum.

“If this law is confirmed, the safety of our surface and groundwater will be jeopardised, and there will be restaurants, hotels, shopping malls in currently protected areas, where the owners will tell us how much it will cost us to be able to access the coastline. Winning this referendum is challenging, but we think people are fed up with policies based on profiteering on account of destroying vital ecosystems. We have a chance to make a real difference this time and preserve one of our biggest natural resources,” explained Uroš Macerl from the environmental organisation Eko Krog.

Nina is a young woman working in an NGO, fighting against inequality, injustice and for women’s rights. She is one of the leading actors and coordinators of the campaign for the referendum against the Water Act. She has so far seen the trade union as an organisation from the past, a remnant from the old days of Yugoslavia. But during her work in the NGO and the preparation of the campaign against the Water Act, she learned that the unions could have a major impact because, unlike the NGO she is working for, the unions are social partners. That’s when she decided to contact the trade union for support.

Luka works for the trade union; he is relatively new in his position as secretary. So far, he has also worked for the trade union, but his job was a good deal less political. He worked in the field, protecting workers’ rights, and doing ‘classical’ trade union work in the company. The difficult political situation in the country raises questions about the trade union position in the public.

Dialogue

Nina sent an e-mail to the largest trade union association in the country. For her, it is obvious that the trade union as social partners needs to participate in the civil initiative she is coordinating. They have come so far already, collected more than 50,000 certified signatures and successfully demanded a referendum. But now, to win this referendum, it is necessary to collect at least 340,007 votes against the Water Act that would have such a huge impact on the population in Slovenia.

Based on her e-mail, she receives a phone call from the largest trade union association in the country.



Nina: Hello, it is great to hear from you. It is so important to have the unions on board in this campaign. You have a major influence as social partners and you can inform all your members!

Luka: Hello, actually I am calling to ask why you contacted the trade union. We are fighting for workers' rights in the workplace, problems with employment and a healthy and secure working environment. We are also fighting for higher wages and the minimum wage, but environmental issues like this usually are not our topic.

Nina: But... you are the unions, you are fighting for the rights of the people, the right to have access to water is important, to anyone living and working in Slovenia.

Luka: I know, and I personally wholly support you and your work, but I am not sure if all our members do. We have members from different political sides, and we don't want to lose them due to a topic that is not really that relevant for us. We are not an environmental organisation...

Nina: Well, this isn't really my topic either; I usually work on women's rights, but... this is so important for everyone... We need to do this together, every vote counts, every support is so important... You don't need to identify with political parties... You are afraid you could lose members, but think again... you could gain members as well... this topic is also crucial for young people and we, the younger generation, don't know much about you and your work... at least, often not enough to become a member...

Luka: And you think joining the campaign would change that?

Nina: Well, it is certainly worth a try... So many organisations support our campaign. I am sure that many of your members would support us as well and you also have an important role in raising awareness and educating and informing your members and all workers.

Luka: That is true. This is an important role of the trade unions. We provide essential information. And as environmental topics will also impact the working conditions and the lives of our members and all workers, I think we can support the campaign as an organisation. How can we help? Tell me, what do you need?

(In reality, the trade union supported the campaign, even giving the campaign organisers the opportunity to have their meetings in the (secure) trade union building because some activists had been physically attacked by opponents. Furthermore, all the trade unions supported the campaign by informing their members and all the workers through social media, the trade union newspaper and the webpage. Some trade unionists also helped as activists in the streets, on the stands, in their work and private time.

And then: The Happy Ending . The referendum was a major success and 86.75% (682,760 people) voted against it. Together we can!).

Tasks

1. In the group, read the dialogue with the context given and discuss similar experiences, opinions and ideas.
2. Discuss the questions and apply the situation to other examples you are familiar with. You can also consider additional resources (Spanish case).
3. Agree on a spokesperson and a number of group findings and prepare a short presentation and questions for the other groups.
4. Report back in the plenary session and participate actively in the discussion.



Questions

1. Does the work of trade unions have to remain within companies, and should trade unions only work for labour rights in enterprises that have unionised workers?
2. Where do you see the role of the unions in the Just Transition?
3. How broadly can the unions support different topics?
4. What does the union do for our future? Legal support is fine, but I can google most information. It is important to influence on a political level.
5. What say do trade unions have in a Just Transition?
6. Do you have any experience, from your trade union work, of connections with other organisations fighting for a common cause?

Concepts and references

1. Concept of the 5 meta-competences to tackle environmental issues
2. Sustainable development
3. Just Transition

<https://zapitnovodo.si/>

<https://www.dw.com/en/young-slovenian-obama-scholar-spearheads-the-fight-for-water-and-equal-rights/a-59137303>

<https://www.greenpeace.org/slovenia/sporocilo-za-javnost/4023/water-referendum-paving-the-way-for-a-historical-environmental-win-in-slovenia/>

<https://www.zsss.si/oddajte-svoj-glas-za-pitno-256/>

<https://www.zsss.si/sindikalne-centrale-voda-ref-67/>

As this has been an actual case, the outcome can be easily presented. Based on the successful action, further participation is being proposed:

<https://www.zps.si/images/stories/energija/2021/Poziv-Vladi-RS-k-takojnjemu-ukrepanju-za-zajezitev-posledic-napovedanega-dviga-cen-energentov.docx.pdf>

https://www.rtvsl.si/gospodarstvo/sindikati-pozivajo-k-zvisanju-minimalne-place-delodajalci-menijo-da-gre-za-provokacijo/598702?fbclid=IwAR24-9KnA5ZCaFxQhXVR5VbleLWonEWWVqIK4PXUcGvrqzVHUR_bmLJEMNg

In Spain, this participation has a longer tradition due to the historical context.

When the unions negotiate for the “Just Transition” in cities or regions affected by the closure of pollution power plants, they become a social agent, looking for new industries or companies to establish in the area and obtain jobs for the redundant workers from the power plant. But also, they are related to local government and other agents looking for new economic activities for those indirectly dependent on the income provided by the electricity industry in the area.

<https://www.publico.es/sociedad/vida-carbon-transicion-justa.html>

<https://www.publico.es/sociedad/centrales-termicas-espana-cierra-martes-mitad-centrales-carbon.html>

Also, in recent months, UGT has been working actively with other organisations for a campaign called “A signature for Mar Menor”, seeking to achieve 500 000 signatures



from all over Spain. The common objective for the campaign is to protect the Mar Menor, a salt lake on the coast of the Murcia region.

<https://www.marmenorporsona.legal/>

https://www.eldiario.es/murcia/medio_ambiente/iniciativa-legislativa-popular-dotar-derechos-mar-menor-supera-barrera-500-000-firmas_1_8426648.html

<https://www.ugt.es/acto-publico-de-ugt-en-defensa-del-mar-menor>

<https://www.ugt.es/salvemos-el-mar-menor>

<https://www.ugt.es/si-no-hay-una-propuesta-del-gobierno-para-aumentar-el-smi-ugt-se-retirara-de-todas-mesas-de>



Activity sheet 2

Collective competence

Roberta Villa
and Miroslav Lacko

Main topic

Renewable energies, Not In My Backyard syndrome and strategy to create alliances with various stakeholders to develop a Just Transition plan.

Target and duration

Target: Trade union officers and representatives

Duration: 3 h 30 - 4 h (coffee break included)

Notes / How to propose this activity

This activity is helpful for exploring the impact of the ecological transition on different stakeholders and the importance of developing strategies capable of considering the collective dimension.

It also highlights the role of trade unions and the various phases of an effective Just Transition plan: identification of the stakeholders, analysis of the various interests, goal-setting, financial sustainability, and negotiation.

The case study is based on a likely situation, characterised by conflict-related interests between stakeholders (municipality, investors, workers, citizens, etc.).

This activity requires an open setting with 5/6 working tables. It also requires specific materials (see below) and the presence of at least two trainers.

Pedagogical objectives

1. To develop a strategy for a Just Transition plan in a conflict situation, considering the interests of the various stakeholders.
2. To negotiate with different stakeholders to define a common path.



Structure of the activity

The activity is a multi-phase role-play, where participants are requested to play different roles (stakeholders).

Steps of the activity:

- introduction of the topic and presentation of the activity (30 min);
- work in subgroups: analysis of the assigned stakeholder's interests and goal-setting (20-30 min);
- 1st round of discussion (role-play): “face-to-face 5-minute meetings” (20-30 min);
- work in subgroups - Strategy definition (20-30 min);

Coffee break (20-30 min)

- 2nd round of discussion (role-play): “face-to-face 7-minute meetings” (30 min);
- 3rd round of discussion - Final meeting and debriefing (30 min);
- evaluation and conclusion (20 min).

Contents and tasks

1. Introduction of the topic and presentation of the activity (30 min)

During the introduction, the trainers will explain and present information about renewable energy sources, highlighting their advantages and disadvantages.

They will also briefly present the issue of pollution from chemical plants and the concept of NIMBY (Not in my backyard) syndrome.

Trainers will divide participants into 5-6 subgroups (minimum 3 participants for each subgroup).

Each subgroup will represent one of the stakeholders and will sit at different tables:

- Investor
- Community/citizens
- Community/Non-profit organisations
- Chemical factory workers
- Trade Union Federation of Chemical Industry
- Trade Union Federation of Power/Energy Sector

The role of the Municipality (role n° 7) and the role of the Chemical factory management (role n° 8) will be held by trainers.

Note:

If the number of participants is 18 or more, it is possible, and better, to create these six groups. If there are fewer than 18 participants, trainers can opt to combine groups 2 and 3 (Community), or groups 5 and 6 (Trade Union Federations).

Keeping the six-subgroup structure enables the possible conflicts of interest between different social actors and various Trade Union Federations to be highlighted.



2. Work in subgroups: analysis of the assigned stakeholder's position and goal-setting (30 min)

Task:

“Read the text of the case study together.

As a group, you represent the stakeholder that has been assigned to you by the trainers.

Use the 'Stakeholder map' (see attachment) to:

- describe your goals and your “best solution”;
- define the main challenges and obstacles you see to achieving your goals;
- identify the three main actors you want to meet because, from your perspective, they play a relevant role and can help you to achieve your goals;
- identify what their main interests are (in this situation);
- list the proposals and requests you want present to these three stakeholders.

Write on three different post-its the name of your group (as a stakeholder). When invited by the trainers, stick the post-its on the board, in the column for the stakeholders you want to meet for a 5-minute face-to-face meeting.

Choose a spokesperson who will conduct the meetings. During the face-to-face meetings, you'll present your requests and proposals. The representatives of the other groups can just listen and ask questions, but they cannot give any feedback or answers.

As a stakeholder, it is possible/likely that you will be invited to meetings by other groups. Choose someone who will stay at the table and represent your group. The representative of your group will listen and take notes of other stakeholders' requests. He/she can ask questions, but he/she will not give any feedback or answers.”

Stakeholder:

Stakeholder map

Goals/Best solution	Challenges and obstacles
Three relevant actors and their main interests	Our requests and proposals
1.	1.
2.	2.
3.	3.



3. 1st round of discussion: “face-to-face 5-minute meetings” (20-30 min)

The trainers will have prepared a board to plan the face-to-face meetings, which will be revealed and accessible to all participants.

Each group will be invited by the trainers to stick the post-its it has prepared on the board, to schedule the appointments with the parties it has chosen to meet, according to its strategy.

The table records which groups, in which order and at what time they will meet.

When invited by the trainers, the spokesperson of each group will go to the table of the group they have to meet, according to the schedule.

The group who proposed the meeting will present, through its spokesperson, its own requests and proposals. The representatives of the group “invited to the meeting” may not comment, they just listen, ask questions and take notes of the requests.

Each meeting lasts for a maximum of 5 minutes. Trainers will control the time by ringing a bell at the end of each 5-minute session. (No extra time may be granted.)

The role of the Municipality and the role of the chemical factory management will be played by the trainers. They are “blocked roles”: the Municipality wants the new plant; the chemical factory management has no other option than closure.

Note: it is possible that two subgroups may meet twice (because they both consider the other stakeholder relevant). Each subgroup will present their requests and proposals in a different meeting session.

Face-to-face meetings

	Chemical factory management	Community non-profit organisation	Community citizens	Municipality	Chemical factory workers	Trade union energy sector	Trade union chemical sector	Investor
1								
2								
3								
4								
5								

4. Work in subgroups - Strategy (20-30 min)

After the meetings, the groups will return to their tables.

Task:

“Share within the group the information you collected during the meetings.

Take note of the requests of the other stakeholders (use a new “Stakeholder map”).

Considering the new information, redefine your goal, strategy and proposals, to negotiate with other stakeholders during the 2nd round of meetings. Define the three parties you want to meet and write your name (as stakeholder) on the post-its, as you did before.

You can also decide to join other groups (if so: go propose alliances now, during the preparatory phase).

Choose a spokesperson to represent the group during the 2nd round meetings. Each meeting will last 7 minutes maximum. During these meetings, the representatives of the groups can discuss and negotiate.



If you invite a stakeholder and the same stakeholder invites you for a meeting, you'll have a double-time meeting (14-minute meeting)."

Stakeholder:

Strategy

Relevant actors and their requests/proposals

1.

2.

3.

Our proposals + argumentation

1.

2.

3.

5. 2nd Round of discussion – 7-minute face-to-face meetings (30 min overall)

The trainers will use a second board table and the groups will schedule the meetings, sticking their post-its (as they did before).

There will be a second round of meetings in which representatives of the stakeholders will negotiate on their needs and requirements, to achieve their own goals.

After the meetings, the groups will return to their places and share the results of the negotiations.

6. 3rd Round of discussion - Final meeting and debriefing (30 min)

The third round consists of a large meeting, which will be facilitated by the trainers.

One representative from each subgroup will be invited to present the results of their negotiations and describe their initial expectations, highlighting whether the group reached its own goals or not.

The trainers will write on a flipchart the different initial goals and the results (positive or negative) of the negotiation process (agreements).

Afterwards, the trainers will ask each spokesperson to present and evaluate the strategy adopted by their group. Participants will also be invited to give feedback about the face-to-face meetings and on the whole process.



We suggest using the Fishbowl Method (1) to consent with other members of the subgroups to participate and contribute to the discussion (taking the place of their colleague).

7. Evaluation and conclusion (20 min)

At the end of the activity, the trainers will evaluate in plenary session the whole activity and present the theoretical basis of collective competence, creating a link with the experience.

The case

Context

In a small town, surrounded by countryside, there is a factory to produce chemical fertilisers. This factory has been very important for the local economy for three decades. However, it is currently going bankrupt and will close, which also means making employees redundant.

The workers at the chemical plant are disappointed that the factory is closing down, and they are losing their jobs. They do not know where they will work, because the factory is not offering alternative jobs and there are few employment opportunities in the city. They cooperate with the trade union of the chemical industry.

The Trade Union Federation of the chemical industry has had discussions with the management of the chemical plant, exerting pressure to avoid the factory closure, trying to protect workers from losing their jobs. So far, they haven't received a positive answer.

Meanwhile, an investor is planning to build a solar power plant in a relatively large area on the outskirts of the city. He also wants to build a factory to produce solar panels.

The power plant will cover the energy needs of the investor's factory, while the rest of the electricity produced will be distributed to the city's households. For this reason, the Municipality is open to the new project.

The community is unhappy because many people will lose their jobs when the chemical plant closes. At the same time, many citizens are against the construction of a solar power plant because it will occupy a lot of land, disrupt the colour and the beauty of the natural surroundings and probably spoil tourism in the area.

The investor will not even provide new job opportunities, as he plans to bring in his own employees. In fact, considering that the production of photovoltaic panels requires a certain amount of experience, the investor plans to employ his employees from another operation.

Not the whole community is against the project. The community, in fact, also includes non-profit organisations, which for many years have drawn attention to the problems of groundwater, streams and rivers affected by pollution produced by the chemical plant. These organisations welcome the arrival of a new investor who plans to use energy from renewable sources.



Concepts and references

Concept of NIMBY

<https://en.wikipedia.org/wiki/NIMBY>

Climate action - key elements

<https://www.un.org/en/climatechange/science/key-findings>

Renewable energy: an overview

<https://www.nrdc.org/stories/renewable-energy-clean-facts>

2050 low-emission economy goals: are we on track?

https://energy.ec.europa.eu/topics/renewable-energy_en

https://energy.ec.europa.eu/index_en

Advantages and disadvantages of renewable energies

<https://news.energysage.com/advantages-and-disadvantages-of-renewable-energy/>

<https://www.conserve-energy-future.com/advantages-and-disadvantages-of-renewable-energy.php>

Data on renewable energies and Solar power

<https://www.iea.org/reports/renewables-2020>

<https://www.iea.org/reports/solar-pv>

Fishbowl method

<https://blogdev.itcilo.org/facilitate-a-fishbowl-discussion/>



Activity sheet 3

Collective competence

Ivelina Hubenova
and Pasquale Pignatale

Main topic

The dilemma between environmental protection vs. employment protection

Target and duration

Target: Trade union officers and representatives

Duration: 3 h

Structure of the activity

The activity can be included within a broader path dedicated to specific aspects and environmental impacts produced in the reference sector.

It also highlights the role of the trade union and the different phases of an effective Just Transition Plan: idea-generating method to involve participants, analysis of the various interests, financial sustainability, building consensus and accelerating discussion.

1. Short introduction in plenary session: the Just Transition Concept and objectives of the activity (15-20 min).
2. Work in subgroups (1 h 30).
3. Report back in plenary (20 min).
4. Discussions in plenary (30 min).
5. Evaluation and conclusion (20 min).

Pedagogical objectives

1. To highlight the key values of Just Transition in metal industry.
2. To identify/understand the stakeholder's points of view.



3. To develop a strategy for a Just Transition plan in a conflict situation, considering the interests of the various stakeholders.

The case

In southern Italy, one of the largest Italian steel companies, with a hundred-year history and branches in several parts of Italy, has compromised the health of citizens and violated human rights for decades, causing serious air pollution. The company employs 8,000 people and related industries generate jobs for an additional 10,000 people.

The population living in the vicinity of the plant "suffer from respiratory problems, heart disease, cancer, neurological disorders and premature mortality."

The debate over the plant's environmental impact is huge. **The State** promised the population and the press that emissions would be reduced by up to 20%, but the Government, which considers steel production strategic, has granted exceptions to production through various legislative decrees by raising the emission limit threshold.

For crimes against the environment and pollution-related causes, the prosecution ordered the confiscation without the right to use the facilities of the hot zone. To protect the creation of employment, the State has started the procedure of putting the company into operation and launched an international tender for the redistribution of the same.

Funds have been allocated by the national recovery plan to decarbonise the production of the steel plant, but a very long lead time for this to happen is expected.

Non-profit green organisations have for many years drawn attention to the problem. They insist that the company and the State take action leading to zero pollution in order not only to prevent environmental degradation, but also to address the severe social inequalities that lead to areas of the world where rights, such as the right to health, are compromised precisely because of environmental degradation and the availability in contaminated sites in disadvantaged communities.

Free and thinking citizens and workers - unites factory workers, unemployed, insecure workers, students, professionals, and citizens.

They demand that those who generated this drama pay for the disaster they have produced. They no longer want to pay with their lives and bodies for the consequences of an ecological, economic and social crisis for which the culprits are known.

They insist on the closure of all polluting sources and the consequent Reclamation and Decontamination of sites and the Economic Reconversion of the territory through the reuse of the entire workforce.

The owner of the largest industrial complex for steel processing wants to prevent adverse consequences for the plant and its business. Many other related activities throughout Europe depend on production at the plant and the supplies it carries out. It is important for him that production continues and he does not pay much attention to what is happening.

The trade union has had meetings with the management of the factory, trying to protect workers, to provide quality workplaces that comply with occupational health and safety. After another death from cancer, the union has called a strike and is calling for the conversion of the factory.

The workers are worried about the situation in the factory. Some of them think that the State and the owner should do everything necessary to modernise the factory so they can have quality, safe and green places that meet occupational health and safety



standards. Other workers don't want to miss another payday. They don't believe in changes, because even the judicial system has blocked the factory's production several times at risk of being fired, but then the government started it again. They think they are alone against everyone. The government has always turned its back on them. There has always been talk and nothing done. Maybe they should fight to keep what they have.

Contents and tasks

1. Introduction on the context and objectives of the activity (20 min)

During the introduction the trainers will explain and present information about trade unions and their demand for a Just Transition in the steel industry and the UN report - the right to a clean, healthy and sustainable environment.

Trainers will divide participants into groups (min. 4 participants in each group)

Each group will present different stakeholders:

- the workers;
- community/citizens;
- the Trade Union Federation of Steel Industry;
- the State;
- NGO/Green organisation;
- The owner.

2. Work in subgroup (1 h 30)

Each group will represent one of the stakeholders (60 min).

After 60 min:

- the group representing the Workers will join the group representing the Trade Union;
- the group representing the Community/Citizens will join the group representing the NGO;
- the group representing the State will join the group representing the owner.

You will exchange your respective solutions and try to negotiate and define a common path and proposals (30 min).

Tasks

1. Read the case individually and then as a group.
2. Discuss the case by answering the following questions (from the group you are representing's point of view):
 - What are the goals, and the solutions you want to achieve?
 - What actions should be determined to achieve the goals?
 - How to mobilise resources to achieve these goals.
3. Try to find respective solutions using the template (60 min).
4. Join the other group to negotiate and define a common path and proposals (30 min).

Note: Don't forget to build a proper strategy to suit the goal of the Just Transition - to ensure a hopeful and optimistic future for all workers...



3. Report back in plenary (20 min)

Nominate a representative of your joint group who will present the proposals to the other groups.

4. Discussion (30 min)

During the discussion, the representatives of the joint groups should try to find a common solution to the conflict between the concern for maintaining safe work, an ecological and safe environment at work, and the choice between work and health.

5. Evaluation and conclusion (20 min)

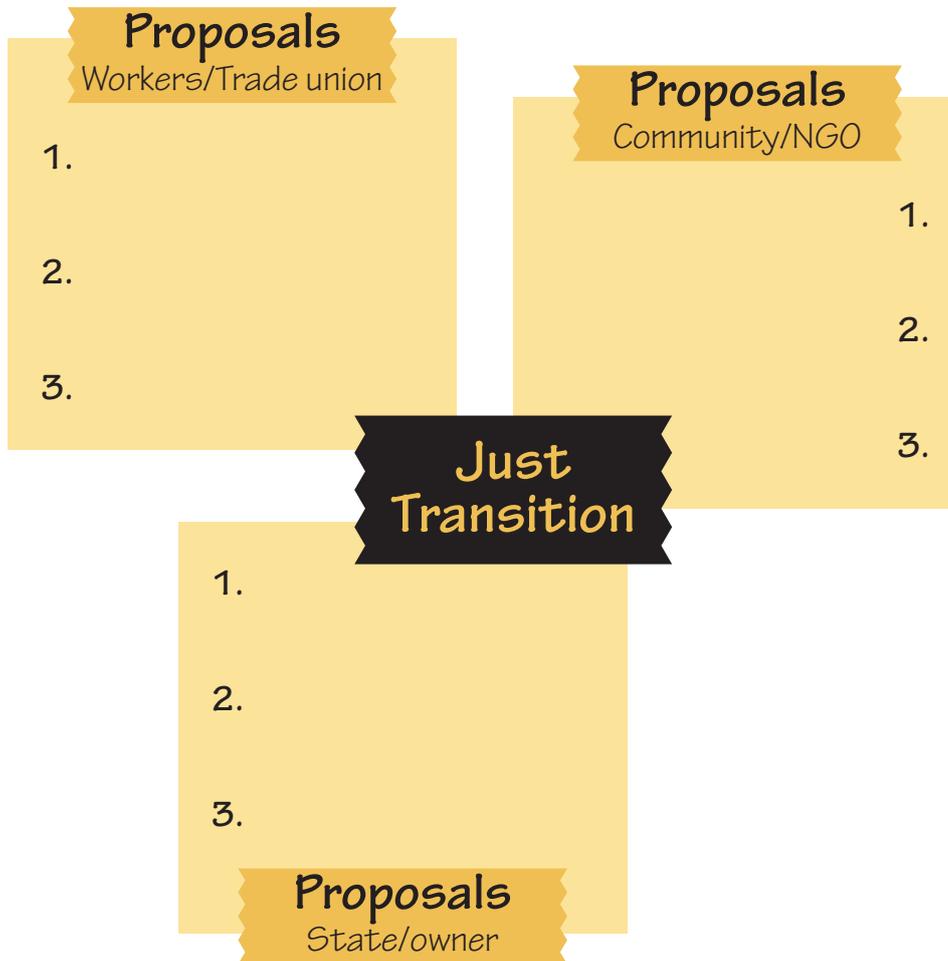
At the end of the activity, the trainers will evaluate in plenary the whole activity and present the theoretical basis of collective competence, creating a link with the experience.

Group representing (60'):

<p>Goals/Solutions</p> <ol style="list-style-type: none">1.2.3.	<p>Actions</p> <ol style="list-style-type: none">1.2.3.
<p>Just Transition</p>	
<ol style="list-style-type: none">1.2.3.	<p>Resources</p>



Joint groups (30')



Concepts and references

Just Transition - a necessary component of the new industrial revolution

[Just transition a necessary component of the new industrial revolution | UNECE](#)

European Green Deal

[A European Green Deal | European Commission \(europa.eu\)](#)

[A Just Transition Manifesto to save the Green Deal – EURACTIV.com](#)

ONU report - The right to a clean, healthy and sustainable environment

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G22/004/48/PDF/G2200448.pdf?OpenElement>

"Free and thinking citizens and workers"

[About Us – liberiepensanti.it](#)



[UN Report: Ilva Taranto among the most polluted areas in the world - UN Italy \(onuitalia.com\)](https://onuitalia.com)

National Recovery and Resilience Plan
<https://www.mise.gov.it/index.php/it/pnrr>

Trade unions and the demand for a Just Transition in the steel industry
[Slide 1 \(tuac.org\)](https://tuac.org)

Methodology - Philips 2x4 x All
[1-2-4-All – ITC ILO Blog \(live-blogitcilo.pantheonsite.io\)](https://live-blogitcilo.pantheonsite.io)



Activity sheet 4

Collective competence

Gheorghe Simion
and José Janela

Main topic

A Just/Sustainable Transition in the education sector considering the different stakeholders' interests.

Target and duration

Target: Trade union officers and representatives (in the education sector, but not only)

Duration: 3 h

Pedagogical objectives

1. To develop a strategy for a Just Transition plan in a difficult health and safety situation, considering the interests of different stakeholders.
2. To negotiate with different stakeholders to define a common path.

Contents

Steps of the activity:

1. Introduction of the topic and presentation of the activity (20 min).
2. Work in subgroups: analysis of the assigned stakeholder's interests and goal setting (20-30 min).
3. 1st round of discussion: "face-to-face 5-minute meetings" (20-30 min).
4. Work in subgroups – Strategy definition (20-30 min) (coffee break, 30 min).
5. 2nd round of discussion (role-play): "face-to-face 7-minute meetings" (45 min).
6. Report back (20 min).
7. Evaluation and conclusion (25 min).



The case

What do we do with the schools in our city?

A situation that can no longer be accepted has existed for many years in our small town.

The 7 primary schools were built 40 years ago and represent a source of illness for children and teachers.

This is due to the use of asbestos in the construction of old buildings. The Parents' Association has notified the Local Authorities (Town Hall) many times of the danger posed by the presence of asbestos in schools. The parents have requested its elimination by refurbishing the school buildings.

At the same time, the Trade Union of Teachers and administrative staff in schools complained that the presence of asbestos in schools endangers the health and even the lives of its members and that this situation cannot continue. The union proposed to hold classes in the two existing high schools in the city, one rehabilitated in 2015 and the other built and completed in 2019.

The local administration started a programme to rehabilitate primary schools in 2021, wanting to renovate 2-3 schools per year, using the vacation period and the one in which the courses were held online, during the Covid-19 Pandemic, managing to complete the works on 2 of them. Unfortunately, in 2022, the funds available to the Local Administration were seriously reduced due to the enormous increase in the prices of electricity, gas and construction materials, leading to the interruption of the school rehabilitation programme.

For many years, the local Energy Cooperative has proposed to the Local Administration to install photovoltaic panels on all buildings (including schools and high schools) and thus gain energy independence, but the project proposed by the Cooperative has been postponed year after year. What is to be done? How can we get out of this dark and dramatic situation?

A possible ray of light appeared with the National Plan for Recovery and Resilience, approved by the European Commission, a programme in which important funds are provided for the development of education infrastructure and especially for Sustainable Development.

Tasks

You have a common case study.

You are divided into groups.

Each subgroup will represent one of the stakeholders:

1. The Parents' Association.
2. The Trade Union of Teachers.
3. The local authorities.
4. The local Energy Cooperative.

Preparation

Read the text of the case study. Use the stakeholder map. Choose a spokesperson who will conduct the meeting.



1st round of discussion

You have 5 minutes face-to-face meeting with each stakeholder. During the meeting you'll present your request and proposals. The representatives of the other group can just listen and ask questions, but they cannot give any feedback or answers. Also on this occasion, the other group will present its requirements and proposals, and your group will only ask questions for clarification.

Strategy definition

After the meetings, the groups will return to their place. Discuss within the group the information you collected during the meetings. Considering the requests of the other stakeholders and the new information, re-define your goal, your strategy, and your proposals, to negotiate with other stakeholders during the 2nd round of meetings (use a new "Stakeholder map" and "Strategy map").

2nd round of discussion

There will be a second round of meetings in which representatives of the stakeholders will negotiate their needs and requirements, to achieve their own goals. Each meeting will last 7 minutes maximum. During these meetings, the representatives of the groups can discuss, negotiate and identify a common pathway of action.

Evaluation and conclusion

One representative of each subgroup will be invited to present the results of their negotiations and describe the initial expectations, highlighting whether the group reached its own goals or not.

Resources

1. Strategy map
2. Stakeholder map

Questions

1. What impression did this case make on you?
2. How do you rate your involvement in the activity of the subgroup you were part of?
3. How do you evaluate the cooperation between the stakeholders, who can allow for complementarity between responsibility and competences?
4. How do you evaluate the negotiations carried out and the results obtained?

Concepts and references

Include this for all cases:

https://etuc.org/sites/default/files/publication/file/2018-09/Final%20FUPA%20Guide_EN.pdf

[Educators on a Heating Planet: Shaping Education Unions' Vision for a Just Transition \(ei-ie.org\)](https://www.ei-ie.org/)

Energy cooperative presentation:

https://www.dropbox.com/s/90drsup0jncirj3/Jos%C3%A9_Janela_Portalegre_Portugal.pptx?dl=0



Stakeholder:

Stakeholder map

Goals/Best solution

Challenges and obstacles

Three relevant actors
and their main interests

- 1.
- 2.
- 3.

Our requests
and proposals

- 1.
- 2.
- 3.

Strategy map

Request/Proposals
of relevant actors

- 1.
- 2.
- 3.

Our proposals
+ argumentation

- 1.
- 2.
- 3.



Integrative activity 1

Fernando Álvarez Senent
and Antonio Ingallinesi

Main topic

Integration of the five meta-competences in a case study

Target and duration

Target: Trade union officers and representatives

Duration: Overall duration: 3 h 30 (breaks excluded)

Structure of the activity

1. Participants are asked to watch the video about the 5 meta-competences and identify the 5 meta-competences related to sustainable development.
2. Participants are asked to imagine two future scenarios (in the study case): one if environmental measures are taken in the company and the other if no measures are taken.
3. Using the backcasting technique, participants are asked to imagine what steps should have been taken by the different characters in the exercise (company, workers, neighbourhood, and mayor of the city) to achieve a sustainable company.
4. Participants should reflect on the interrelation between the five meta-competences.

Pedagogical objectives

1. To understand the meaning of the 5 meta-competences.
2. To apply the 5 meta-competences to a real case study.
3. To understand that most of the time it is not possible to work on a meta-competence in isolation, as they are interrelated.

The case

Context and current situation

Here is a case of industrial reconversion involving four different stakeholders: a chemical company, workers & trade unions, neighbourhood citizens and a mayor and politicians.

STUDY CASE

Stakeholder #1: Company

The chemical company has been in the area for about 80 years. It now employs 430 direct workers and 600 contract workers. It applies very good labour contracts, economically and in terms of welfare.

The company is cautious about safety, and standards are very high. The core process is oil refining to produce automotive fuels and oil. Meanwhile, demand contraction and green transformation mean the plant does not have (much of) a future.

The company has started reducing production lines and personnel and has also stated the possible total closure of the plant. The fall in demand is due to the increase in electric-powered vehicles, which will be much more significant in the coming months.

The company declares itself ready to invest in new processes and transformation. A possible reconversion is in the plastic waste treatment process to produce ethanol. It would solve the problem of waste management in the region, which spends a lot of money to transfer it to other countries.

The company confirms its interest in remaining on the site, but cannot wait too long for political authorisations. Otherwise, it could evaluate more extreme choices, such as a total divestment.

Stakeholder#2: Workers and trade unions

They claim to maintain total employment levels. Divestment would create a heavy social impact on society and the city's economy.

There would also be a problem linked to the total environmental reclamation (air, water, soil) of the site, which imposes enormous costs that risk being borne by the community (tax) if the company abandons the site.

They claim reconversion to new production processes linked to the company's core business. They want the company to make the right investments to maintain the site and employment levels.

They ask the mayor to take responsibility for authorising the investments that the company would like to make.

Stakeholder #3: Neighbourhood citizens

Citizens who live in the neighbourhoods near the refinery have been calling for a shutdown for years. They are furious and very determined. They have also formed a committee against the industrial presence on that site.

They believe that the presence of industrial plants of that nature is incompatible with sustainability.

They complain about noise, air, and soil pollution levels beyond acceptable limits, which is not tolerable. They denounce the bad smell in the air and claim that the value of their houses has decreased. No one wants to live in those neighbourhoods.

They also denounce truck traffic in the area as being too great and no longer sustainable. They ask the mayor to do everything possible to stop manufacturing activities at the site. They absolutely do not agree to granting new permits for new plants.

Stakeholder #4: City mayor or politicians

The mayor is in great difficulty. He is torn on one hand by the strong pressure of the citizens who are demanding the closure of the refinery, and on the other hand by the pressure exerted by workers and their families, who demand a guarantee for their jobs. The mayor is aware of the great economic and social impact that the closure of the refinery would entail.

The political party to which he belongs has already declared that the new industrial project proposed by the company is not acceptable.

He has neither the strength nor the courage to adopt a definitive position.

Tasks

1. Participants must watch the following video about the 5 meta-competences related to sustainable development: <https://www.youtube.com/watch?v=HKrLM4FGaCA&t=2s>

By watching the video, participants should reflect on the 5 meta-competences and understand that possible solutions to environmental problems are complex and need to be addressed holistically, not in isolation.

Participants would be asked to associate each sentence below with one of the meta-competences: Prospective, Systemic, Ethics and responsibility, Change or Collective.

- Sustainable development is going to involve changes of different nature and therefore, one of the main tasks will involve identifying these changes and their nature: improvement, mitigation, adaptation or transformation.

Meta-competence:

- Meta-competences that require articulation between individual competences (psychosocial and intercultural) and collective competences (actions at a group or societal level) that only make sense as a whole. Meta-competence:

- Sustainable development can only be understood as a complex process that requires a systemic vision. Meta-competence:

- The future can no longer be seen as a mere projection of the present, but must include uncertainty and unpredictability. This perspective is essential for preparing for change and anticipating possible responses.

Meta-competence:

- This can only be done within a framework of ethical functioning, achieving a Just Transition for all involved. Meta-competence:

2. After watching the video, participants will be asked to read the case and answer a set of questions related to each meta-competence: Prospective, Systemic, Ethics and responsibility, Change or Collective.

3. Visioning is about picturing a desirable future and describing what it might look like.

Participants have to imagine two future scenarios: one if environmental measures are taken in the company and the other if no measures are taken.

How will these measures affect the future of the company, the neighbourhood, and the workers themselves, and how will the future be if no measures are taken?

Imagining a future scenario in which no environmental measures are taken provides an opportunity to speak about: climate change, global warming, greenhouse gas emissions, mostly carbon dioxide (CO₂) and methane, the rise in temperature, and the dangerous effects it has for the planet and living beings.

Imagining a future scenario in which environmental measures will already be taken is the opportunity to speak about sustainable energy, clean energy, Just Transition, workers training in green jobs, and the role of trade unions in all this process.

4. Backcasting is a technique that makes participants look back from a future scenario, identifying and assessing changes and actions for that future to come true. It allows participants to plan and set an agenda for change by exploring feasibility and the implications of achieving certain changes.

Participants imagine that this company will be sustainable in the future. What steps should have been taken by the various stakeholders in the exercise (company, workers, neighbourhood, and mayor of the city) to achieve this?

5. In the final exercise, participants are asked to choose one meta-competence (e.g., change) and explain why this meta-competence has an impact on two other meta-competences (e.g., collective and systemic)

Questions

1. Ethics and responsibility

- Who should bear the cost of sustainable development: the company or the workers, with the help of the state?
- Up to what point or limit can a worker be forced to leave a stable job that is polluting the planet for a more uncertain, but environmentally sustainable one?
- The role of the mayor between neighbourhood criticism and the work provided by the company: are his political indecisions made with a particular interest in mind?
- What would the workers' attitudes be about upskilling and reskilling? Do their unions have a responsibility to convince them for upskilling and reskilling?

2. Collective

- What is the role of the union in this process?
- What alliances can be made between the different stakeholders?
- Are there any different interests among the different stakeholders?
- Would the future of the company affect some of the different stakeholders?

3. Prospective

- What can the company do to prepare for an uncertain future?
- What about workers and trade unions?
- Would the company's closure affect the rest of the city's economy and its neighbourhood? Explain

4. Systemic

- What kind of complex and coordinated organisational business decisions will be required to convert the company from an oil refinery to a recycling company?

5. Change

- Are workers prepared for the future of the company?

- How will the company's future affect employees' training needs?
 - In a changing future, will the same working conditions be maintained?
 - Can there be progress with no change?

Concepts and references

1. The 5 meta-competences for environmental sustainability
2. Greenhouse gases
3. Global warming
4. Climate change
5. Sustainable development
6. Just Transition



Integrative activity 2

Roberta Villa
and Miroslav Lacko

Main topic

Development of a Just Transition strategy, applying all the 5 meta-competences.

Target and duration

Target: Trade union officers and representatives

Duration: 2 h

How to use this activity?

This final activity should be scheduled just before the evaluation session.

This activity aims to integrate all the insights and learnings gained during the exploration of the 5 meta-competences

The heart of this activity is reflecting and answering a questionnaire. Trainers can also decide to prepare a graphic CANVA (<https://www.canva.com/>) with the same questions.

Structure of the activity

1. Introduction, synthesis of the 5 meta-competences, and presentation of the questionnaire (15 min).
2. Working triads (1 h / 1 h 15).
3. Report back and discussion in plenary session (30-45 min).

Pedagogical objectives

To integrate and apply all the 5 meta-competences explored in the training to a real situation.

Tasks

Participants will be divided into groups of three.

Each group will work on the same task:

“This is the final activity of the course.

We ask you to discuss and identify a situation (on a local, regional, or company level) that at least one of you is familiar with and would require a Just Transition Process.

Given the insights and what has been learned from the previous steps, please answer the following questions.

Choose a spokesperson to present the results.

You have 1 hour and 15 minutes to complete the task.”

Questions

The questions may be part of an online Questionnaire (example: on Google Forms) or may be designed on a CANVA graphic. In this case, participants will answer directly on the CANVA.

1. Context

- Describe the situation in a few words (context, main problem).

2. Ethics and responsibility

- Why do you think acting in this situation from a personal and a trade union perspective is important?
- What should be “Just” in this situation, in your opinion?
- What role should trade unions play and why?

3. Prospective competence

- What are the risks of inaction in this situation? (Please describe the situation in ten years’ time if nothing is done).
- What is a possible positive solution to this situation? (Please describe the situation in ten years’ time if action is taken).

4. Systemic competence

- Which policies or measures should be adopted?
- What would be the possible impacts of these measures on other sectors?
- What would be the possible impacts of these measures on communities / workers / companies?
- Do you see any side-effects of these measures, and how might they be mitigated?

5. Collective competence

- Who are the stakeholders in this situation?
- What are their main interests?
- Which actors should be involved and how in the transition process? How should workers and citizens be involved in the process? (Describe how you would promote the activation and participation of communities and workers).

6. Change

- What are the main areas of change in this situation?
- In the current situation, what opportunities and resources could facilitate or promote the transition?
- What are the main obstacles and challenges to transition?
- How should/could the change be sustained financially?
- How would the transition bring about a change on a collective level and individual level?

Concepts and references

A document on the 5 meta-competences.

The following video about the 5 meta-competences:

<https://www.youtube.com/watch?v=HKrIM4FGaCA&t=2s>



Integrative activity 3

Ivelina Hubenova
and Pasquale Pignatale

Main topics

1. Systemic approach to a Just Transition strategy.
2. Current and future impacts of climate change.
3. Integrating a sense of responsibility and accompanying the necessary changes and proposals contributing to the common good.
4. Mitigation strategy and policy.

Target and duration

Target: Trade union officers and representatives

Duration: 3 h 40

Structure of the activity

This activity works on three meta-competencies: ethics and responsibility, prospective, and systemic.

The activity helps to focus on:

- possible inaction regarding climate change, identifying the negative consequences that inaction in the metal sector will have on other sectors;
- the impact of sectors specific measures that identify the positive consequences on actions in the metal sector will have on other sectors;
- highlighting the dynamic connection between different sectors of activities.

1. Brief introduction on the context and objectives of the activity (20 min)

2. Work in a subgroup + report back (2 h)

Part I - Focus on climate change, ethics and responsibility and systemic competences (60 min)

Part II - Focus on climate change, prospective and systemic competences (60 min)

Part III - Focus on actions that you would take in your sector to improve/shed light on the alternatives (60 min)

3. Comments and conclusion (20 min)

Pedagogical objectives

1. To highlight the key value of Just Transition in the metal industry.
2. To reflect on social responsibility.
3. To describe the current and future impacts of climate change and analysing interconnection between different sectors.

Contents and tasks

- Brief introduction on the context and objectives of the activity (20 min)

During the introduction, the trainers will explain and present information about demand for a Just Transition in the steel industry and meta-competence "Systemic".

Depending on the number of participants, the trainer will create working groups (min. 3 persons in each group).

Each group will work in a different economic sector.

Note: The sectors could be changed in connection to the participants' area (sectors of activity).

Groups:

Group A - Agriculture sector Group C - Tourism sector

Group B - Maritime sector Group D - Building and construction sector

Contents and tasks

Part I - PMI/Minus

- Work in subgroup (40 min)

Read the case and the dialogue in your group.

You have to put yourselves into the future.

Imagine that no action is taken to improve the metal sector, and things remain as they are.

Please identify the negative consequences that inaction in the metal sector will have on your sector that could affect your sector.

Spend a few minutes to imagine individually and then discuss in your group.

NB: Identify all the negative things you can think of. Again, don't critique yourself. Simply spill out all the negative points you can think of.

The case

The story is set in a metalworking company in a country where the Government considers steel production strategic.

The company employs 8,000 people, and related industries generate jobs for an additional 10,000 people.

The company founded in the 1960s produces dioxin emissions beyond the permitted limits. The surrounding area is heavily polluted.

The Government, with various legislative decrees, has granted exceptions to production by raising the emission limit threshold.

Cancer deaths from factory emissions of pollutants into the atmosphere have increased in recent years.

After yet another death from cancer, the union proclaims a strike and calls for the conversion of the factory.

Characters

- Giovanni: 50-year-old worker, union member, employed for 25 years, with a wife who stays at home, one son in university, and one daughter in high school, with a mortgage to pay, who does not intend to join the strike.
- Francesco: 42-year-old trade union representative, environmental activist who knows the environmental impacts of the company, is the son of a company worker who died of cancer and is pushing for the conversion of the company.

The dialogue

Giovanni: Hi Francesco, I'm sorry, but this time I don't join the strike.

Francesco: Why, you've always been on our side.

Giovanni: I'm still on your side, but I don't want to miss another payday. However, nothing ever changes. Even the judiciary has blocked the production of the factory several times, with the risk of being sacked, but then the Government restarted it. We are alone against everyone!

Francesco: But look, we're getting closer to the goal.

Giovanni: What goal are you talking about? The closure of the factory? And where do I go then at 50? This is my job, and I want to keep it tight ...

Francesco: We don't want to close the factory, we never wanted to do it, but we want to push for Just Transition. Don't you want working conditions and wages to be improved? We deserve to have quality workplaces that meet occupational safety. They will continue to kill us if we don't give a strong signal. Do you know how many workers got sick and how many died in the last 10 years?

Giovanni: From what I have seen in recent years, there has always been a lot of talk, and nothing has ever been done. Because? Is there no willingness to bargain? Are there not enough resources? In my opinion the factory is too old. It is a very difficult path to try to reconvert it. If we go to a fight, we risk closing forever.

Francesco: Have you ever even thought about the enormous damage that has been done to the environment? They also found dioxin in breast milk. More than 2,000 head of cattle that had grazed on contaminated fields were culled. How long will it last? The company has had several opportunities to use the best technologies available and to reclaim the territory, and has never done so.

Giovanni: I am aware of the damage to this factory. All were accomplices. I've been breathing this shit for over 20 years, and nothing has happened to me yet. The fights had to be done a long time ago. It's too late for me. I do not want to risk it. Besides, I just do my job. I'm not the one responsible.

Francesco: Every action we take in the company contributes to causing impacts on the environment. In addition to technological investments, you can start simply by improving work processes. You can do training for this, and it has never been done by the company.

Giovanni: The Government has always turned its back on us. How long will it take for Just Transition? Maybe we should fight to keep what we have.

- **Report back in plenary (20 min)**

Choose a spokesperson to present the work done in plenary (5 min. per group). Use the template, and fill the results to present to the other groups.

Contents and tasks

Part II - PMI/Positive

- **Work in subgroup (40 min)**

Read the case and the dialogue in your group.

You have to put yourselves into the future.

Think about the past actions taken to improve the metal sector in connection with climate change.

Please identify the positive consequences that actions in the metal sector will have on your sector and could have an impact on your sector.

Spend a few minutes to imagine individually and then discuss in your group.

NB: Identify all the positive things you can think of. Don't critique yourself along the way; simply spill out all the positive points that you can think of.

The case

In 2022 the steel industry represents one of the main economic sectors. Steel is a material used by many other sectors of the economy as one of the most versatile and recyclable materials. This industry, however, is among the most polluting: among the heavy industries, the steel sector is in first place in terms of CO₂ emissions and second in terms of energy consumption.

Due to the characteristics described above, the steel industry plays a key role in the effort to reduce polluting emissions.

But let's look into the future: the dialogue is between two workers in 2042 from a large metalworking company in a country where the Government considers steel production strategic.

Characters

- Pasquale: a 58-year-old worker, trade unionist, employee for 30 years as a specialist blast furnace worker, demonstrated in the past against the deaths at work and for the conversion of the factory.
- Ivelina: 26-year-old researcher, employee of the Technological Centre of the Faculty of Energy Engineering of the University of Taranto, partner of the company in the development of alternative energy that guarantees the company's energy needs.

The dialogue

Pasquale: Hi Ivelina, do you know that today is the commemoration of a very sad day for me and this factory? Many years before, there was a very serious accident where my colleagues lost their lives due to a fire involving seven workers. And this was not a one-off case. There were protests and strikes for days on end.

Ivelina: Hi Pasquale, I didn't know the details. A real tragedy. It's good that things have changed. Today in the company, the workers no longer work in the areas adjacent to

the blast furnaces, we have robots do the work, and we have reduced the possibility of accidents to zero.

Pasquale: In those years, I remember, in addition to the numerous and frequent accidents, there were also environmental problems. Since northern winds were expected, the Municipality asked the population not to leave their homes so as not to breathe the polluted air produced by the company. Cattle were slaughtered because they grazed on contaminated fields.

Ivelina: In these last years, the company has invested heavily in training and empowering workers. Today, with the collaboration of the University and other companies in the area, more efficient systems of recycling but also of regeneration, and reuse are developed in Green Steel; there has been the transition from fossil fuels to renewable fuels and the development of hydrogen-based fusion. Furthermore, the capture and storage of CO₂ is planned.

Pasquale: At the time, we could not imagine such a big change. We thought that to build what the company is today we would have had to stop everything and start from scratch. Most of the companies depended on steel; if the sector stopped, the country would have problems.

Ivelina: In these last years, the company has worked in the technological transformation of the sector with infrastructural and system innovations, together with the use of digital technologies. And for this, people have been trained and retrained. Our steel is very competitive.

- **Report back in plenary (20 min)**

Choose a spokesperson to present the work done in plenary (5 min. per group).

Use the template, and fill the results to present to the other groups.

Contents and tasks

Part III - PMI/Interesting

- **Work in subgroup (40 min)**

The PMI method is a way to analyse proposals and situations critically.

In the previous two parts of the task, you saw both sides of an argument and thought more broadly about an issue.

In Part I and II you worked on the positive and negative side of climate change. What will be the future based on our actions or inaction? And how this affects other sectors. Now you have a rich collection of insights that will help you decide your next steps to achieve appropriate and sustainable resolution.

In this step, you make your decision. You can now choose more effectively. The key to remember is that it's not about simply counting the positives or negatives. Some items may be trivial, while others may be incredibly significant.

Your task is to identify actions that would you take in your sector to improve/shed light the alternatives:

- working conditions;
- quality jobs;
- human health.

Most ideas will raise quite some questions. Often the 'Interesting'-phase focuses on the details. These are the questions that must be answered to take the idea to the next level.

- What main policy and measures should be adopted to achieve it?

- What are the main obstacles to reach it?
- How would these policy/ mitigation measures impact the labour market?
- How would they impact different economic sectors?
- What is the role of the trade union?
- What laws (or constraints) should be enacted?
- What should the various stakeholders give up?

- **Report back in plenary (20 min)**

Choose a spokesperson to present the work done in plenary (5 min. per group).

- **Comments and conclusion (20 min)**

Template



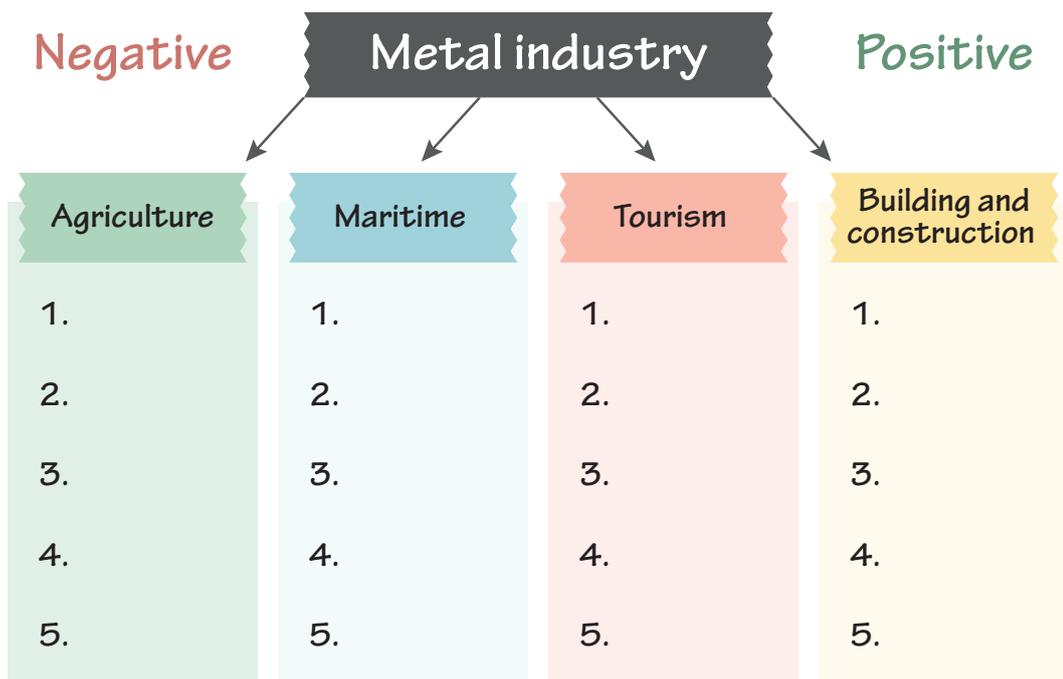
Plus



Minus



Interesting



Glossary

Climate Change

Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. Human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil, and gas.

Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.

Examples of greenhouse gas emissions that are causing climate change include carbon dioxide and methane. These come from using gasoline for driving a car or coal for heating a building, for example. Clearing land and forests can also release carbon dioxide. Landfills for garbage are a major source of methane emissions. Energy, industry, transport, buildings, agriculture, and land use are among the main emitters.

Just Transition

Just Transition is a framework developed by the trade union movement to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity. In Europe, advocates for a Just Transition want to unite social and climate justice, for example, for coal workers in coal-dependent developing regions who lack employment opportunities beyond coal.

Sustainable Development

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

The 17 SDGs are integrated—they recognise that action in one area will affect outcomes in others, and that development must balance social, economic, and environmental sustainability.

European Green Deal

The European Green Deal, also known as the EU Green Deal and the Green Deal, is a new growth strategy, policy and roadmap of the European Union (EU) that aims to make the EU a fair and prosperous society with a modern, resource-efficient and competitive economy in which there will be no net greenhouse gas emissions in 2050 and economic growth does not depend on the use of resources.

Mitigation (of climate change)

Human intervention to reduce emissions or enhance greenhouse gas sinks.

Mitigation measures

In climate policy, mitigation measures are technologies, processes, or practices that contribute to mitigation, for example, renewable energy technologies, waste minimisation processes, and public transport commuting practices.

Concepts and references

European Green Deal

Just Transition - a necessary component of the new industrial revolution

[Just transition a necessary component of the new industrial revolution | UNECE](#)

UN report - The right to a clean, healthy and sustainable environment

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/G22/004/48/PDF/G2200448.pdf?OpenElement>

European Green Deal

[A European Green Deal | European Commission \(europa.eu\)](#)

[A Just Transition Manifesto to save the Green Deal – EURACTIV.com](#)

National Recovery and Resilience Plan

<https://www.mise.gov.it/index.php/it/pnrr>

Trade unions and the demand for a Just Transition in the Steel industry

[Slide 1 \(tuac.org\)](#)



Integrative activity 4

Roberta Villa
and Miroslav Lacko

Main topics

1. Current and future impact of climate change, both at an individual and collective level.
2. Mitigation strategies and policies.
3. Systemic approach to transition strategies.
4. Role of trade unions.

Target and duration

Target: Trade union officers and representatives

Duration: 2 h (part 1) / 1 h 30 (part 2) / 1 h (part 3)

Overall duration: 4 h 30 (breaks excluded)

How to use this activity?

This activity works on two meta-competences: prospective and systemic.

We suggest using it in the first part of the training course, immediately after the “Ethics and Responsibility” Activity, which could be useful for the start.

This activity helps to focus on the possible consequences of inaction (or insufficient action) regarding climate change, assuming a medium-term time perspective.

It is also helpful to highlight the systemic connections between different sectors and policies, focusing on the cross-cutting impact of sector-specific measures.

The two main parts of this activity should be introduced and followed by the experts’ presentations, on climate change impacts (introduction to part 1) and mitigation policies (part 3).

Pedagogical objectives

1. Describe the current and future likely impacts of climate change, both at an individual and collective (global) level, taking a medium-term perspective.
2. Identify priorities of action to mitigate climate change impacts and their social effects, also considering cross-sector influences and the possible role of trade unions.
3. Analyse the current state of the art, at a national level, regarding climate action and climate change mitigation policies.

Structure

Part 1 - Focus on climate change and prospective competence

Introduction of the topic (expert's presentation) and explanation of the activity (30 min)

“**Future Lab**” - Working in subgroups (60 min)

Report back (30 min)

Part 2 - Focus on mitigation policies and systemic competence

Introduction (15 min)

“**Let's change into change!**” - Working in subgroups (45 min)

Report back (30 min)

Part 3 - Focus on climate action at national level

“**Are we on track?**” - Expert's presentation (30 min) and open discussion in plenary session (30 min)

Contents and tasks - Part 1

Introduction

During the first step, the trainers should insert an expert presentation (or provide a presentation themselves) aimed at:

- introducing the concept of climate change;
- explaining the main causes of global warming and climate change;
- describing their current impact;
- describing their impact in the future.

For the introduction, we suggest showing participants the video of Prof. Jean-Pascal Van Ypersele, former Vice-Chair at IPCC (Intergovernmental Panel on Climate Change).

The trainers can also use different reference materials and the glossary to prepare the introduction (e.g., <https://justtransitionnow.squarespace.com/>)

FUTURE LAB - Working groups

After the introduction, the trainers will divide the group into 3/4 subgroups (4/6 people each).

The task for the subgroups is divided into three main steps. We suggest giving the activity sheets of each step separately, every 20 minutes.

Step 1 - Dystopian future/worst-case scenario (20 min)

“We are in 2050. Nothing has been done about climate change, no measures have been taken, or not enough. Things continued as they are now (business as usual), getting worse and worse.

Please describe how people live in Europe and the situation in the cities, coastal areas, and inner parts of the countries. Describe what is happening around the world. How is the environment? How is the weather? How is housing? How do people earn a living? Which jobs are still in place and what are the new ones? How do people move from one place to another? What are the main social problems?

We invite you to be very practical and realistic in describing the possible scenario if nothing is done.

You can use words or drawings (or a mix of them) to describe your “dystopian future”.

You have 20 minutes to complete the task.”

Step 2 - Utopic future/best-case scenario (20 min)

“We are in 2050. Things are going well. Many efforts have been made to mitigate climate change and reduce its social and environmental impacts. Governments have agreed on investment plans and implemented practical mitigation measures.

Please describe how people live in Europe and the situation in the cities, coastal areas, and inner parts of the countries.

Describe what is happening around the world. How is the environment? How is the weather? How is housing? How do people earn a living? Which jobs are still in place and what are the new ones? How do people move from one place to another? What are the main social problems?

We invite you to be very practical and realistic in describing the possible best-case scenario.

You can use words or drawings (or a mix) to describe your “utopic future”.

You have 20 minutes to complete the task.”

Step 3 - How did we get there? (20 min)

“We are in 2050. Considering the “Best-case scenario” you described previously, please try to list the main policies and measures that have been adopted to achieve it. Be very practical and define the main areas of investment and action.

Choose a spokesperson to present in 5 minutes your dystopian future, your utopic future and the policies, and measures you listed.

You have 20 minutes to complete the task.”

Report back (30 min)

The spokespersons from each subgroup will present the worst-case scenario, the best-case scenario, and the priorities of action (policies and measures).

Contents and tasks - Part II

Introduction (15 min)

Starting from the results of the previous part of the activity, the trainers will identify, as part of a discussion with participants, the main economic sectors which should be involved in transition:

1. Energy systems
2. Transports
3. Agriculture/Food
4. Buildings and construction
5. Industry
6. Waste management
7. Cities and settlements

The trainers will also introduce systemic competence and will explain the activity.

“Let’s change into change!” - Activity in subgroups (45 min)

Depending on the number of participants, the trainers will create 4/6 working groups (minimum 3 persons for each group).

Each group will analyse an economic sector (possibly the one they know best).

Trainers will choose 4/6 sectors to analyse, considering participants’ profiles (sectors of activity).

Task for the working groups:

Please read the following questions, discuss them with your colleagues, and answer:

- a) Considering the sector / policy area you are analysing, which are the main measures that should be taken in your country to “close the gap” between the current situation and the “best-case scenario” you described previously?
- b) Do you see any “signs of change” or any “seeds of a positive future” in your country? What are the main obstacles for reaching the best-case scenario?
- c) How would these policies / mitigation measures impact your country's labour market? How would they impact different economic sectors? What would the social impacts (positive and / or negative) of these policies be?
- d) In the transition process, what should the role of trade unions be?

You have 45’ to complete the task.

Choose a spokesperson to present your reflections (in a maximum of 5 minutes).”

Report back

The spokespersons will present the answers to the questions assigned (5 minutes for each group).

One expert should be present at the report back in preparation for the next session.

Contents - Part III

One or more experts should be present to the report back session for Part II.

The expert/experts will be invited to comment on the proposals developed by the groups.

The experts will briefly present the country's current situation: is the country on track with the 2030 Agenda for Sustainable Development? In which economic sectors do we see the most significant gaps? (Experts should also consider the strengths and weaknesses of the National Recovery Plan of the country).

In the plenary session, the trainers will invite participants to an open discussion on the contents presented by the experts and the role of trade unions within the transition process.

Concepts and references

1. Climate Change

Climate Change refers to a change in the state of the climate that can be identified (e.g., by statistical tests) by changes in the mean and / or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces, such as modulations in the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use. Note that the Framework Convention on Climate Change (UNFCCC), in its article 1, defines climate change as: "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods". The UNFCCC, therefore, makes a distinction between climate change attributable to human activities altering the atmospheric composition and climate variability attributable to natural causes. (Source: IPCC glossary)

2. "Climate Change: current and future effects"

Prof. Jean-Pascal van Ypersele, UCLouvain, Belgium, former Vice-Chair at IPCC, 13 September 2021.

<https://www.youtube.com/watch?v=YUahf5Ki9sU>

3. IPCC - Intergovernmental Panel on Climate Change

The IPCC is the United Nations body for assessing the science related to climate change.

The IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options.

The IPCC prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impact and future risks, and options for reducing the rate at which climate change is taking place. It also produces Special Reports on topics agreed by its member governments, as well as Methodology Reports that provide guidelines for the preparation of greenhouse gas inventories.

<https://www.ipcc.ch/>

4. **National Geographic - Seven things to know about climate change and resources library on climate change**
<https://www.nationalgeographic.com/magazine/graphics/seven-things-to-know-about-climate-change>
https://www.nationalgeographic.org/topics/resource-library-climate-change/?q=&page=1&per_page=25
5. **NASA website on climate - NASA Climate time machine**
<https://climate.nasa.gov/>
<https://climate.nasa.gov/interactives/climate-time-machine>
6. **Wuppertal Institute - Actions to mitigate climate change impacts**
<https://wupperinst.org/en/topics>
7. **Climate Action Tracker**
<https://climateactiontracker.org/>
<https://climateactiontracker.org/countries/eu>
8. **Green Recovery Tracker**
<https://www.greenrecoverytracker.org/>
9. **Article on climate action: are we on track with Paris Agreement goals?**
<https://unfccc.int/news/climate-commitments-not-on-track-to-meet-paris-agreement-goals-as-ndc-synthesis-report-is-published>
10. **IPCC Glossary**
https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_AnnexI_Glossary.pdf

Glossary

(source: IPCC Glossary)

Adaptation (to climate change)

In human systems, the process of adjustment to actual or expected climate and its effects, to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects.

Adaptation can be incremental (adaptation maintains the essence and integrity of a system or process at a scale) or transformational (adaptation that changes the fundamental attributes of a socio-ecological system in anticipation of climate change and its impact).

Mitigation (of climate change)

Human intervention to reduce emissions or enhance greenhouse gas sinks.

Mitigation measures

In climate policy, mitigation measures are technologies, processes, or practices that contribute to mitigation, for example, renewable energy technologies, waste minimisation processes and public transport commuting practices.

Policies for climate mitigation and adaptation

Policies are taken and/or mandated by a government – often in conjunction with business and industry within a single country, or collectively with other countries – to accelerate mitigation and adaptation measures. Examples of policies are support mechanisms for renewable energy supplies, carbon or energy taxes, and fuel efficiency standards for automobiles.

Sustainable Development Goals

The 17 global goals for development for all countries established by the United Nations through a participatory process and elaborated in the 2030 Agenda for Sustainable Development, including ending poverty and hunger, ensuring health and wellbeing, education, gender equality, clean water and energy, and decent work: building and ensuring resilient and sustainable infrastructure, cities and consumption; reducing inequalities; protecting land and water ecosystems; promoting peace, justice and partnerships; and taking urgent action on climate change.

Conference of the Parties (COP)

The COP is the Supreme Body of UN conventions, such as the United Nations Framework Convention on Climate Change, comprising parties with a right to vote that have ratified or acceded to the Convention.

United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC was adopted in May 1992 and opened for signature at the 1992 Earth Summit in Rio de Janeiro. It came into effect in March 1994 and, as of May 2018, had 197 Parties (196 Countries and the European Union). The Convention's ultimate objective is the stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The provisions of the Convention are pursued and implemented by two treaties: the Kyoto Protocol and the Paris Agreement.

Kyoto Protocol

The Kyoto Protocol is an international treaty adopted in December 1997 in Kyoto, Japan, at the Third Session of the Conference Of the Parties (COP 3) to the UNFCCC. It contains legally binding commitments in addition to those included in the UNFCCC. Countries included in Annex B of the Protocol (mostly OECD countries and countries with economies in transition) agreed to reduce their anthropogenic greenhouse gas emissions (GHG), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride, by at least 5% below 1990 levels in the first commitment period (2008/2012)

The Kyoto Protocol came into effect on 16 February 2005 and, as of May 2018 had 192 Parties (191 States and the European Union). A second commitment period was agreed in December 2012 at Cop 18, known as the Doha Amendment to Kyoto Protocol, in which a new set of Parties committed to reduce GHG emissions by at least 18% below 1990 levels in the period from 2013 and 2020. However, as of May 2018, the Doha Amendment had not received sufficient ratifications to come into effect.

Paris Agreement

The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in December 2015 in Paris, France, at the 21st session of the Conference of the Parties (COP) to the UNFCCC.

The agreement, adopted by 196 parties to the UNFCCC, came into effect on 4 November 2016 and, as of May 2018 had 195 Signatories and was ratified by 177 Parties.

One of the goals of the Paris Agreement is “Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° above pre-industrial levels”, recognising that this would significantly reduce the risks and impact of climate change.

Additionally, the Agreement aims to strengthen the ability of countries to deal with the impacts of Climate Change. The Paris Agreement was intended to become fully effective in 2020.

List of contributors

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