

# BARMETAL



## Digitalization, Automatization and Decarbonization: Opportunity for strengthening collective bargaining in the metal sector

### Mutual learning events

#### Deliverable 8.1

#### Summary

How are current efforts towards digitalization, automatization and decarbonization reshaping the metal industry? What does the experience of Germany show us and how can the studied countries benefit from it? Can these technological advances strengthen collective bargaining?

Within the BARMETAL project, the research team organised three online regional Mutual Learning Events to address the above questions:

1. Mutual Learning Event May 30, 2024 – Denmark, Hungary, Serbia and Sweden
2. Mutual Learning Event June 12, 2024 – France, Italy, Netherlands, Romania
3. Mutual Learning Event June 17, 2024 – Czechia, Germany, Poland, Slovakia

In these events, the participants shared their experiences, plans or concerns in relation to digitalisation, automatization and decarbonisation, described the state of collective bargaining and discussed policy recommendations for the future of social dialogue.

The events offered expert presentations as well as panel discussions of representatives of employers and employees of the metal industry from the respective countries. The summary below provides more details on each of these events.

The events were seen as a success where the research findings from the BARMETAL project directly informed constructive discussions among social partners to share their views on how collective bargaining is currently addressing the challenges emerging from digitalisation, automation and decarbonisation (D-A-D) and how to trigger improvements in bargaining practices and outcomes.

## Mutual learning event: Denmark, Hungary, Serbia and Sweden

May 30, 2024

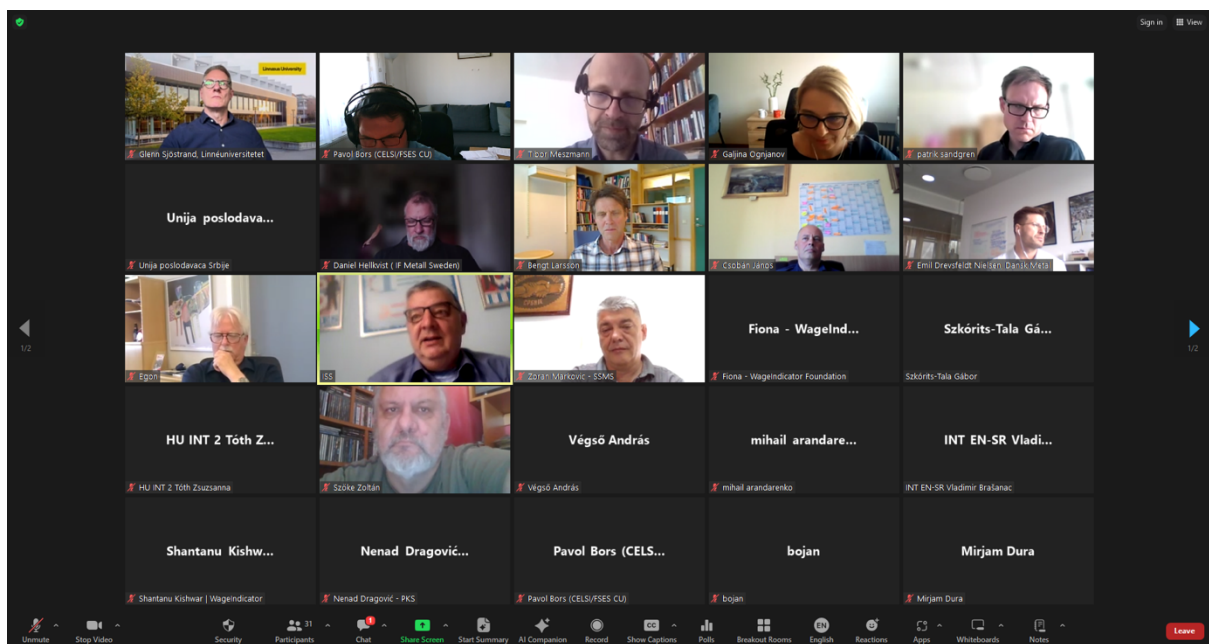
The BARMETAL mutual learning event titled *“Digitalization, automation and decarbonization in the metal industry: evidence and comparative findings from Denmark, Hungary, Serbia, and Sweden. How to strengthen collective bargaining in the metal sector in response to DAD?”* took place on May 30, 2024 in online form, on zoom, with a total of 32 participants, including representatives of social partners from four countries and experts.

At the event Glenn Sjöstrand (Linnaeus University), Pavol Bors (CELSI), Galjina Ognjanov, (University of Belgrade) Bengt Larsson (Linnaeus University) compared the sectoral industrial relation systems and presented main findings from four countries - Denmark, Hungary, Serbia, and Sweden - on the impact of digitalization, automation and decarbonization on the labour market, employment, working conditions and the quality of jobs in the metal industry. In their interventions, representatives of six social partners reflected on two guiding questions, *on, first, the most important challenge regarding DAD for their organisations? And second, what was the most important topic in the past for their organisation related to DAD.* Daniel Hellkvist, IF Metall Central “ombudsman”, Patrik Sandgren, Teknikföretagen (Technology Industries of Sweden, EO) Research, Innovation and Industrial Development Officer both from Sweden, Zoran Marković, president, SSMS - Independent Union of Metalworkers of Serbia, and Dragan Matić, president, of ISS - Industrial Trade Union of Serbia, Zoltán Szőke, expert-consultant, Vasas - Metalworkers Union Federation, Hungary and Emil Drevsfeldt, consultant, TU Dansk Metal.

Interventions confirmed main findings of national reports. All interventions highlighted that social partners in all countries consider education, training and skill formation of major importance, but also that suppliers in general face greater challenges than OEMs. There was a great difference among Scandinavian countries on the one hand as positive examples, and Hungary and Serbia, on the other as negative in terms of engagement of sectoral social partners in collective bargaining and social dialogue. In Denmark, representatives of social partners reported high levels of cooperation, but benefitted also from a strong commitment on part of the government regarding investments in green transition. Whereas Swedish social partners also acted hand in hand, state support was comparatively lacking. In Hungary, large OEMs started the green transition, suppliers to a lesser extent, while – battery production created new challenges in the context of environmental protection and health and safety. In Serbia there are no car producers currently producing and multinational companies outsource peripheral production lines and in general dictate in the area of DAD. Whereas skill formation and migration was of major challenge for both countries, Serbian representatives reflected also on outdated production systems and poor infrastructure.

The working language of the event was in English, Hungarian and Serbian, which was possible due to provision of simultaneous translations of high quality. The event was moderated by Tibor T. Meszmann (CELSI) and closing words were offered by Galjina Ognjanov, (University of Belgrade). The mutual learning event enjoyed the technical support of Wageindicator Foundation.

MLE 30 May, 2024



## Mutual learning event: France, Italy, the Netherlands, Romania

June 12, 2024

The meeting discussed the impact of technological trends like automation, digitalization and decarbonization in the metal sector across Italy, France, Romania and the Netherlands. Challenges faced by the metal sector, including the need for upskilling and collective bargaining strategies, were explored. Emphasis was placed on fostering social dialogue, collaboration between stakeholders, and a just transition plan, particularly in the automotive industry.

### Trends, Industries, and Workforce Impact

Researchers from Italy discussed various topics including carbonisation, automation, and digitalisation. They touched on the potential of these trends to impact different industries and job markets. Later, researchers from France provided an in-depth analysis of the French automotive industry, its ongoing restructuring, and the challenges faced by workers and unions in the wake of technological innovation. They highlighted how digitalisation and automation have impacted employment and working conditions, and how trade unions have struggled to negotiate fair working conditions in the face of these changes.

In the Dutch metal sector, it was found that while the sector is not a major part of the Dutch labour force, it generates significant revenue. The study found that industrial relations in the sector are mainly governed by two major collective agreements, which are generally binding and apply to the entire sector. However, the sector is undergoing significant changes due to digitalization, optimization, and decarbonization, while there are simultaneously huge labour shortages. There is a significant need for reskilling and upscaling. The study also noted that the role of collective bargaining in this sector is crucial for workers' rights and the adaptation of the industry to new challenges.

In Romania, the research team discussed various topics related to labour markets and employment. An overview was presented of the current trends and challenges in the Romanian labour market, including a significant labour and skills deficit, an increase in flexible work arrangements, and a slow pace of digitalization. They also highlighted the rapid wage growth but noted that around 2 million employees were still earning the minimum wage. Furthermore, it was shared that there is low trade union density and the need for improvement in the legislative framework, as it was considered insufficient and inconsistent in enforcing protection for workers. The team also discussed the need to integrate these challenges into collective bargaining strategies.

The Romanian researchers discussed the digitalization and automation trends in the Romania automotive sector, highlighting the government's efforts to stimulate these processes and the challenges posed by the shift towards electric vehicles. She emphasized the need for collective bargaining to incorporate these transformative processes and proposed measures to facilitate dialogue between the government and social partners. Juan then discussed the French case, pointing out the ongoing industrial decline and the lack of negotiation frameworks for trade unions regarding new technologies. He highlighted the potential for institutional innovation in this area.

### **Collective Bargaining Challenges and Future Prospects**

The General Secretary of Romania National Trade Union Confederation, discussed the challenges faced by the collective bargaining system in Romania due to the liberalization of labour legislation in 2011. He explained that the new legislation, which required both employers and trade unions to cover more than 50% of the total number of employees in a sector, led to the disappearance of sectoral collective labour agreements. However, he also noted that a new legislation, endorsed by the Romania government in 2022, could potentially restart negotiations at the sector level. He also touched upon the impact of digitalization and automation on the metal sector and the automotive industry in Romania. Benoit, another participant, made some additions to the discussion regarding the car manufacturing industry in France, specifically mentioning Stellantis, Renault, and Toyota.

Benoit emphasized the importance of social dialogue and collaboration between employers, trade unions, and the state in the automotive sector, particularly in the context of the recently updated sector contract for 2024-2027. He also highlighted the need to address the industry's negative image in terms of working conditions and to focus on its positive role in innovation and job creation. Furthermore, he stressed the necessity of multilateral dialogue involving governments and non-governmental organizations to ensure socially acceptable transitions, particularly in the face of technological and ecological changes. Serena added that a just transition plan is needed to manage the effects of the transition, address regional imbalances, and ensure democratic participation in decision-making. Both agreed that the Bar Metal project could provide important stimuli for these challenges.

### **Discussing Profit-Over-Worker Strategy and Social Dialogue**

The discussion involved topics such as the "Poince Deatshitacolls" and "Boffington soft", with Franck expressing concerns about Stellantis leader, Carlos Stavares' profit-over-worker strategy which may lead to factory closures and job losses in France and Italy. The group agreed on the importance of maintaining collective bargaining and a fair distribution of gains. The discussion also touched on the

need for revitalizing social dialogue, collective bargaining, and the importance of language interpretation in facilitating communication.

### Next steps and recommendations

- Trade unions to develop strategies for collective bargaining on digitalization, automation, and decarbonization processes across different countries and sectors.
- Trade unions to push for greater involvement of workers and unions in decision-making processes related to technological and environmental transitions.
- Social partners to promote reskilling and upskilling programs for workers affected by job transitions due to digitalization and decarbonization.
- Employers and trade unions to negotiate predictive management of jobs and skills to address the changing skill requirements.
- Policymakers to develop national and European-level industrial policies to mitigate the asymmetries and imbalances created by the transitions in global value chains.
- Social partners to explore innovative forms of work organization and participation in decision-making processes related to technological and environmental changes.
- Trade unions to advocate for the integration of digitalization, automation, and decarbonization issues into collective bargaining processes.
- Researchers to conduct further studies on the impact of transitions on employment, working conditions, and skills requirements across different sectors and regions.
- Social partners and policymakers to collaborate with civil society organizations and stakeholders to ensure socially acceptable and just transitions.
- Trade unions to negotiate for training and retraining programs to equip workers with the necessary skills for the changing job landscape.

MLE 12 June, 2024

# BARMETAL



## Digitalisation, automation and decarbonisation in the Dutch metal sector



Fiona Dragstra - WageIndicator Foundation  
12 June 2024



## Mutual learning event: Czechia, Germany, Poland, Slovakia

June 17, 2024

Social partners and experts from Czechia, Germany, Poland, and Slovakia met to discuss the results of the national reports and ways forward for particular countries. Gerhard Bosch presented the perspectives, challenges and opportunities emerging from D-A-D to inform two panel discussions.

The event was attended in total by 52 participants and occurred in English, while interpretation was provided to Czech and Polish.

### **First panel discussion – D-A-D and collective bargaining**

Question to Mr. Stefan Solle, Office Brussels Gesamtmetall – Association of employers in the metal industry in Germany

Firstly, the German report has shown that although collective bargaining coverage in the metal industry has declined, most medium-sized and larger companies are still covered by the sectoral collective agreements.

Secondly, it shows that an impressive number of new collective agreements have been concluded in connection with digitalization and decarbonization, such as the many future-oriented collective agreements or the collective agreements on further training.

Thirdly, the report states that German co-determination helps companies to weather crises well and cope better with structural change.

Do you share this assessment and do the companies organized in Gesamtmetall see collective agreements and co-determination as a resource for coping better with digitalization and decarbonization?

Question to Martin Čech (Slovak trade union OZ KOVO)

The Slovak analysis shows that bargaining is not yet the mechanism to address the company/employee needs emerging from DAD. Large automotive manufacturers implement their own strategies to address training needs internally, but mostly outside of the process of collective bargaining. Which topics, e.g., training/reskilling, could be addressed by collective bargaining, instead of the current unilateral and scattered employer strategies at the company level?

Question to Mr. Gregorz Pietrzykowski (Polish NSZZ Solidarnosc)

Sectoral Level

In Poland, there is no sectoral collective agreement in the automotive industry. Do you think there is a chance for it to come about in the future, or does the experience of the trade unions so far suggest that it is very difficult, almost impossible? Or is it possible to create a sectoral agreement (an agreement that would not be a full collective agreement) that deals with only a small part of the issues related to work in the automotive industry? What issues could we start with?

Question to Michal Hrubý, expert from Škoda Auto University and Economics University in Prague

In Czechia, similarly, collective bargaining is not the platform where current challenges related to DAD are addressed. Knowing the stakeholders in the automotive industry in Czechia, do you see prospects for some social dialogue in the sector? Are there any topics that need to be addressed by both social partners?

After responding to the above questions, a second question was raised to all panelists:

Many employees need further training in the course of digitalization and decarbonization. Is the metal industry in your country prepared for this task? And within what framework, will collective bargaining be the main platform where reskilling is set?

### **Second panel discussion – policy implications for social partners to strengthen social dialogue in response to D-A-D**

The panel was moderated by Barbara Surdykowska (IPA) and discussed the following questions:

Question to Uwe Fink (IG Metall):

The German report has shown that the social partners have concluded many innovative collective agreements on further training and DAD. In addition, the social partners are also involved in 27 regional transformation networks, which are financed by the government's Future Fund for the Automotive Industry. Furthermore, the German Bundestag has passed a training allowance for companies particularly affected by the transformation, primarily on the initiative of IG Metall.

These are ambitious projects for shaping social dialogue at various levels: Region, sector, company, and company. My question: What will be the most important negotiation topics in the course of the transformation of co-determination and collective bargaining policy in the coming years?

Question to Paulína Pokorná (Association of Industry Federations and Transport):

The existence of sectoral committees in Slovakia seems to be an effective communication platform for shaping policies related to DAD. Can you explain, in particular, which challenges of DAD are you addressing and how? How do you see the future of the committee and its impact on policy making?

Question to Mr. Ivo Navalný (OS KOVO):

In Czechia, we observe a lack of coordination between social partners, but also between social partners and the policymakers. The sectoral committees are missing, understanding challenges in the automotive industry is generally low. What are the ways out in your opinion?

Question to Marcin Vitasek (Polish association of the automotive industry):

In Poland, the inaugural meeting of the Tripartite Automotive Team took place in June 2021. What are the main challenges facing the team? Is the activity of the public authorities in the team sufficient? And what are the challenges facing the automotive industry in Poland that should be analyzed first and foremost in the bipartite dialogue between trade unions and employers' organizations?

Each panelist also responded to a second question:

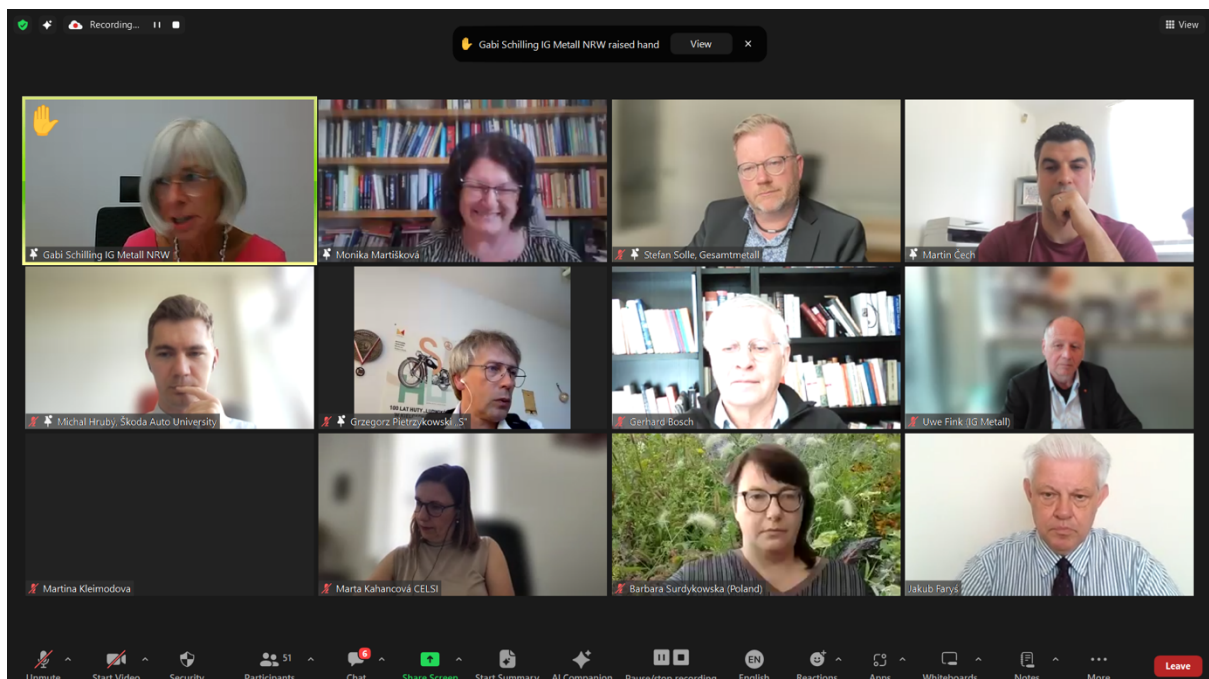
What do you see as the main challenges in the area of DAD (digitalization, automation, decarbonization) in the automotive sector in your country and what role should social dialogue play in relation to this particular challenge that you see as crucial?

Should a broader dialogue take place alongside the classic social dialogue (trade unions - employers), e.g., with the participation of local government?

The key outcomes from the event can be summarised as follows:

- In Germany, social partners are actively supporting the transition process in response to D-A-D, yet the response is confined to German workplaces, and the spillover of these best practices, policy tools and support funding to foreign subsidiaries of German multinational companies is yet limited
- In the Visegrad countries, limited attention in social dialogue structures is given to the questions of D-A-D. If addressed, this is mostly at the company level, and limited to large end manufacturers e.g. in the automotive industry. The panelists identified a need to raise awareness also among the suppliers to these companies, thus along the whole supply chain. If the suppliers cannot meet the demands on workers' skills and working conditions in relation to D-A-D, they should question their continuous operation in the EU markets.
- A good practice was presented by the Slovak employers' federation APZD on sectoral committees, established outside of the regular realm of tripartite and bipartite social dialogue, to discuss dedicated strategies in response to D-A-D and just transition processes in the automotive and electronics industries.

MLE June 17, 2024





The outcomes of the three Mutual Learning Events informed the preparation of Deliverables 7.1 and 7.2 of the BARMETAL project, namely, a toolkit how to engage workers' representatives in addressing the challenge of D-A-D at the company level; and a comparative policy report summarising key findings from the research and policy debates including the mutual learning events.

# BARMETAL



We cordially invite you to the Barmetal webinar - mutual learning event:

**Digitalization, automation and decarbonization in the metal industry: evidence and comparative findings from Denmark, Hungary, Serbia, and Sweden.  
How to strengthen collective bargaining in the metal sector in response to DAD?**

**May 30, 2024  
10.00 – 11.30 CET (online via zoom)**

We will present findings from four countries - Denmark, Hungary, Serbia, and Sweden - on the impact of digitalization, automation and decarbonization on the labour market, employment, working conditions and the quality of jobs in the metal industry, and will discuss the findings with invited speakers, social partners from all four countries.

The webinar is a closed event for invited representatives of social partners and experts.

You can join us at <https://wageindicator-org.zoom.us/j/81710256485>

## Agenda

10.00 Introduction: brief presentation of the BARMETAL project (Tibor T. Meszmann, CELSI)

10.05- 10.30 Digitalization, automation and decarbonization in the metal industry: evidence and comparative findings from Denmark, Hungary, Serbia, and Sweden.

Joint comparative presentation of 4 research teams. Speakers: Glenn Sjöstrand (Linnaeus University), Pavol Bors (CELSI), Galjina Ognjanov, (University of Belgrade) Bengt Larsson (Linnaeus University)

10.30-11.10 Reflections of social partners

Daniel Hellkvist, IF Metall (TU) Central "ombudsman", Sweden

Patrik Sandgren, Teknikföretagen (Technology Industries of Sweden, EO) Research, Innovation and Industrial Development Officer

Zoran Marković, president, SSMS - Independent Union of Metalworkers of Serbia

Dragan Matić, president, ISS - Industrial Trade Union of Serbia

Zoltán Szőke, expert-consultant, Vasas - Metalworkers Union Federation, Hungary

Emil Drevsfeldt, consultant, TU Dansk Metal

11.10-11.25 Questions from the audience

11.25-11.30 Closing

# BARMETAL

## Digitalisation, automatisisation and decarbonisation in the metal industry Evidence and comparative findings from Denmark, Hungary, Serbia, and Sweden

### RESEARCHERS:

Lars Gradaal – *Linneuniversitetet, Sweden*

Bengt Larsson – *Linneuniversitetet, Sweden*

Glenn Sjöstrand – *Linneuniversitetet, Sweden*

Pavol Bors – *Central European Labour Studies Institute, Slovakia*

Tibor T. Meszmann – *Central European Labour Studies Institute, Slovakia*

Galjina Ognjanov – *Faculty of Economics of the University of Belgrade, Serbia*

Dragan Aleksić – *Faculty of Economics of the University of Belgrade, Serbia*

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**BARMETAL**  
**Mutual Learning Event**  
**30th May, 2024**



**Co-funded by  
the European Union**

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# **Digitalisation, automatisisation and decarbonisation (DAD): opportunity for strengthening collective bargaining in the metal sector**

- **Main aims of the BARMETAL project:**

- diagnosis of current situation in sectoral social dialogue and collective bargaining in the metalworking industry in conditions of technological change - digitalisation, automatisisation and decarbonisation (DAD)
- detecting challenges for industrial relations across 12 EU Member States and 1 Candidate Country:
- understanding key developments and challenges deriving from DAD for metal manufacturing companies (e.g. challenges for working conditions, vocational education, changed skill demand)

# Research, main outputs of the project

**Research:** desk research, statistics, media reports and data collection via interviews with sectoral and company-level respondents in 12 countries

## **Outputs:**

- country factsheets about key bargaining characteristics,
- country-specific policy briefs and recommendations,
- a comparative policy report,
- a learning resources toolkit to inform the action of social partners.

**Website:** [celsi.sk/en/barmetal/](https://celsi.sk/en/barmetal/)

**Consortium** of 8 research institutions and 10 associated partners:

**Scuola Superiore di Studi Universitari e di Perfezionamento S. Anna Pisa** - Italy (SSSA, consortium leader), the **Central European Labour Studies Institute Bratislava** - Slovakia (CELSI), the **Wageindicator Foundation** Amsterdam the Netherlands (WIF), **Linneuniversitetet** - Sweden (LNU), **Bucharest University of Economic Studies** Romania (ASE), **Institute for Public Affairs** Warsaw - Poland (IPA), **Faculty of Economics of the University of Belgrade** - Serbia (UBG), **Charles University, Faculty of Science** – Czech Republic (CUNI).

**Associated partners** include both **EU-level stakeholders and country-specific social partners.**

# Industrial Relations in metal in the four countries

	TU and employer density	CBA coverage and dominant level	Main characteristics of CBA and SD
<b><u>DNK</u></b>	52% of companies in metal unionised, high density rates	coverage 82% (private sector 73%); Sectoral CBA with local adjustment	Strong non-conflictual cooperation between social partners on sectoral level
<b><u>HUN</u></b>	Cca. 7% - NI (manufacturing)	21.8% total economy (company level)	Dominant Company level CBA, symbolic (not tripartite!) national social dialogue, project-based sector level information sharing, strong role of the government/state
<b><u>SRB</u></b>	26.4% (2014) – 25% (2019)- total economy	30% (2019) company level	Dominant company level, with central level tripartite social dialogue
<b><u>SWE</u></b>	70% vs 90% (2023) total economy	90%, Sectoral dominant, but company level increasing significance	strong partnership, low conflict (except Tesla/IF Metal), Welfare state strong, but gradual liberalisation/decentralisation, “organised decentralisation”: increasing role of company level

## Denmark – Industrial relations and DAD-context

- Denmark is a small open economy dependent on exporting industries – the **machinery** industry is large, **metal** is moderate, and **automotive** is small.
- **Industrial relations** characterised by strong trade unions and employer associations; negotiating **bipartite collective agreements at sectoral level** with adj. **locally** → **CA-coverage** : 82% (priv. sector 73%); appr. 52% of enterprises have local union reps.
- There are very **strong political** and **social partner commitment** regarding digitalisation, automation, and decarbonisation ambitions → to stay ahead in development and stay competitive
- General and sectoral **collective agreements** do not specifically regulate DAD, but, aspects such as further **education/training**, and **H&S** of course relates to this, and there is both **bipartite and tripartite cooperation** on employment policies and vocational training.
- **Social partners** and have a joint Technology and cooperation committee (TEKSAM), which: follow support information, guidance and development work to promote cooperation in the companies, including the use of **new technology**, and lately also on **green transition**.





# DK company case studies: Digitalization/Automation

- All three companies use digital tech. in **adm. systems**: finances, HR, and enterprise resource planning (ERP) systems, as well **automation** in production (Robotics/CNC machines).
- **Main reasons for new tech**: productivity, cost efficiency, business expansion. Robots also to increase quality, production flow, and replace/release workers from monotonous tasks
- Additional "driving forces" are **requirements from customers**, and in "lower-level bottom-up improvements" **suggestions from the employees**.
- Only in the largest company did **local TU** have a consultative role: BUT **employees had some influence** on implementation – because of experiences of failed implementation previously
- Just as on sectoral level, local **level TU reps** seem to **agree on the need for automation**
- **Further education/training is the big local issue**: send out their own knowledgeable workers + bring in education from the tech-supplier + one company finance external further education for 12 employees/year too "top up" their education/training as blacksmiths/technicians etc.
- **Decarbonisation is still in "start-up" in the companies**. The largest one (#1) has a **formal sustainability policy since 2021**. The smallest started its journey by completing its first **Climate Report** two weeks prior to the interview.



# Hungary - Industrial relations and DAD context

Hungarian metal manufacturing - **key sector** in an export-oriented economy.

**Automotives** highly integrated into the global and EU economy – high vulnerabilities to global changes and exposure to new EU regulations. Capital and labour mobility both high.

## **Characteristics:**

- High FDI + government-supported sector – maintaining attractiveness for (new) companies
- Technological upgrade: company-centric subsidy schemes, different for large and SMEs
- OEMs and Tier1s leading in the introduction of DAD; SMEs struggle, typical: small-scale change

## **IR and social dialogue:**

- Formal/symbolic at national level + collective bargaining decentralised to company level.
- Low density rates /capacities of sectoral social partners. CB coverage estimated at 20%

## **Workplace level social dialogue and collective bargaining:**

- Works councils have greater information and consultation rights than TUs, encompassing social dialogue only if trade unions cooperate with WCs
- DAD not an issue on collective bargaining agenda, at best appears on company-level social dialogue

## **Sectoral social partners - at best soft coordinating, or lobbying roles:**

- See obstacles to introduce DAD: labour shortage, skill and productivity and investment gaps.
- Joint commitment to improve skill formation and increase productivity, job security



# Company case studies: impact of DAD and social dialogue

## *Impact on production and workers*

### **Company A - Automotive company:**

Leading technological change, in decarbonisation of production and in e-products. Large differences between cohorts of blue and white collars in training and internal mobility opportunities. Major variation in technological change among shops – and impacting on segments of blue collars

### **Company B - basic metal production:**

Gradual change in the last decade but great insecurity since 2022. Certain skills position – electric, IT professionals gained in significance over time. Some are now also leaving due to insecurity-crisis. Retraining need high, but also job insecurity.

**Social dialogue in crisis:** severe in **Company B** (breach of CBA by employer, bankruptcy procedure, insecurities, reestablishment/reelections) in **Company A** a shorter period without elected WC and a period of non-harmonised cooperation between WC and trade union (2016-2022).

**Collective bargaining** – *Narrow agenda: wage, employment and working condition centered.*

**In Company B defensive** (aim: limit redundancies) in **Company A assertive** concentrating on collective wage bargaining



# Serbian economy and Industrial relations system

- **Serbia is a typical small emerging economy that relies on export-led growth.** More than ¼ of total exports comes from the Metal sector.
- **The Metal sector in Serbia has become very attractive for the FDIs** because of relatively low labour costs and high Government subsidies (more than one-third of the country's FDIs during the 2016-2020 time span went to the metal sector). Over half of all newly created jobs by the FDIs in the same period are located in three sub-sectors (C24, C25 and C29) (Arandarenko et al, 2021).
- **Industrial relations in Serbia** are regulated by the comprehensive body of labour legislation. Trade Unions are established on all three levels.
- **Trade Union density** has been decreasing since 2020 and stands at around 25%. Adjusted bargaining coverage rate is at around 30%. Employer organization density 25% (OECD and AIAS, 2021)
- **Representativeness** of workers' and employers' associations remains the primary constraint hindering possibilities for collective bargaining.
- Two Confederations of Trade Unions and one Employers' Association participate in SEC.
- General collective agreement is non-existent (statutory minimal wage applies), **sectoral collective agreement for metal sector has also not been negotiated**, whereas collective bargaining on company level are mostly practiced within large companies.

# National policies and social dialogue in regard to DAD

- **Industry 4.0 and DAD present as narratives in public discourse, advocated within both academic and professional circles.**
- **Governmental initiatives for DAD in the metal sector are predominant.**
- **Accession process accelerated transposition of the EU regulatory and strategic documents.**
- **Industrial Policy Strategy of the Republic of Serbia for 2021-2030** – addresses the issues of education, fostering innovation, digital transformation, investment, infrastructure, internationalisation and circular economy.
- **Smart Specialisation Strategy of the Republic of Serbia for the period 2020-2027** which incorporates vertical (sectoral) policies further pointing at the relevance of DAD, specifically for metal sector (machinery and equipment manufacturing) as one of four priority sectors.
- As part of accession process, Ministry for Environmental Protection of the Republic of Serbia formed the Special Working Group for Circular Economy in support to private companies thus facilitating transformation of their traditional business models towards circular economy: **Roadmap for Circular Economy in Serbia 2020, The Low Carbon Development Strategy for period 2023-2050.**
- **The role of trade unions in these processes is still rather weak.** DAD related issues still do not affect collective bargaining, as trade unions representing workers still focus mostly on basic workers rights to assure decent working conditions and fair remuneration.



# Case studies: collective bargaining & DAD

- Two companies selected for case studies in collective bargaining focused on DAD in the metal sector in Serbia.
- Both companies have initiated DAD processes and have developed further plans and strategies in this direction.
- Both companies are large, well recognized on the local market and strongly export-oriented.
- **Company 1 is a local company.**
- **Company 2 is a greenfield investment.**
- Both companies have representative trade unions active in collective bargaining.
- Both companies have introduced LEAN/KAIZEN system allowing active participation of workers in improvement of working processes and working environment.
- We visited the companies and interviewed trade union representatives, workers and managers.
  - **Example statements:**
    - *Collective bargaining, negotiations mainly focuses on vacations, wages (basic wages, increases, allowances and other incomes, technological redundancy, sometimes about organizing a strike and its procedure. When it comes to investments, employers generally do not inform employees about investments and technical and technological changes. (TU representative, Serbia)*
    - *I expect a lot more things to change, I've worked a lot on myself. I think there are opportunities for professional development. This is one part of the automation, soon I hope there will be more. (Production worker, Serbia)*
- **Union density varies between 80% (C1) and 45% (C2).**
- Collective bargaining is an on-going process in both companies. Collective agreements are signed and periodically revised.
- The awareness of DAD changes and its effects seems low coupled with lack of initiatives to bargain over DAD.
- **Main managerial decisions, including those related to DAD are made without consultations with trade union representatives.** In C2 the mother company in Germany pushed the local management toward implementation of DAD.
- It is generally perceived that digitalization and automatization have led to **changes in work requirements, opening new needs for upskilling and reskilling.** However, safety, efficiency and productivity have been improved and the work has become easier as some operations are automatized. Younger workers mostly remained on their posts working with automatized machines while the older one, not ready to cope with new challenges left the companies.
- In support of DAD and transition from manual operation to digital technology the C2 has introduced an **internal training center and entered into dual education system.** C1 takes part in the newly adopted dual education system in Serbia, and provides various types of trainings internally as well as through external training providers. However, these issues are still out of scope of company social dialogue and are primarily initiated by management and implemented through the company human resources department.
- **CB is focused on decent work, not sustainable work.**



## The Swedish Industrial relations system

- The **industrial relations** are characterized by strong trade unions and employer associations negotiating collective agreements with a high degree of autonomy from the state, and with wide bargaining coverage and relatively low levels of conflict (Tesla/IF Metall is a current exception).
- There is a large **welfare state** based on social democratic traditions, however, Sweden have seen the introduction of more liberal features, such as increased fees in the unemployment insurance funds, a loosening of employment regulation (with more temporary contracts), and an organized decentralization of collective bargaining from the 1980s onwards.
- **Swedish trade unions** are strong and are by tradition organized primarily on an occupational/industry basis, in three class-based confederations – one each for blue-collar (LO), white-collar workers (TCO), and for academically trained professionals (SACO).
- About 90% of all employed are covered by collective agreements and the general level of union membership is about 70% in 2023.
- **Swedish employers** are also highly organized in the employers organization (Svenskt Näringsliv). Ca. 90% are members in 2023.

## National policies and the role of social dialogue for shaping DAD policies

- There has been a strong political and social partner commitment from Swedish employers and the unions during the last decade.
- Even though general and sectoral collective agreements does not specifically regulate DAD issues, the general cooperation and negotiation at cross-sectoral level has been successful to stay ahead and competitive.
- Union influence on digitalization of work is mainly exercised through the codetermination process, specified by law and the cross-sectoral Development Agreement from 1985.
- Also, some occasional statements from the IF Metall's joint CAs, concerning "sustainable work", under § 19 *Measures for developing the company*, which indicates some general joint views and the ambition to solve digital and environmental transitions locally, and for competence development in the automotive industry (in the blue collar agreement).



# Company case studies: tackling DAD challenges and trade union involvement

- **The companies** have well reasoned strategies to implement digital technologies and argues well for why certain technologies are used and others are not. Changed working tasks, replacing/releasing workers from monotonous and administrative work, seem to be arguments to develop DAD from both the employers and the unions.
- The level of implemented DAD practices and technologies are varied. Automation has been a concern for a long time in the studied companies but more intensively used digitalization is a more recent technology. For **Company 1** it is of vital interest to electrify, but for **Company 2** electrification is currently a non-issue as their vehicles are used way out in the woods with no access to charging systems.
- Decarbonization is perhaps the main challenge that has been taken on most strongly at **Company 1** where no more research and development is spent at "old" diesel and petrol technology.
- Digitalization is mainly used in the automated parts of the productions lines and automation is increasing for robotics and production units.
- The vehicles produced at **Company 2** are linked to internet systems to be constantly monitored as regards their need of maintenance and support for problem solving at distance. A digitalised stock system is used with coordinated inventories and time coordinated deliveries to the production-lines. They are currently mainly investing in a new ERP-system.
- Both **companies and unions** at the companies are heavily involved in the DAD-strategies. But there are differences in **union involvement** based on the size of the companies and unions, the products, but also in "cultural" traditions.
- There are possibilities for the **workers** to have a say in changes of the organization of the work, working conditions and the like, even though most of the shop floor workers are not directly active in the involvement concerning DAD – they leave that to union representatives.
- Issues of implementing new technologies, training and competence building are mainly based on company needs and blue-collar workers accommodation to these – not negotiations with the unions. Most workers seem to adjust to the situation.
- The active support of the workers are none the less necessary for the implementation of new technologies, for instance the new ERP-system at **Company 2** has not been able to be fully implemented due to some lack of training and resistance from parts of the working staff.
- Training, retraining, up-skilling, re-skilling and recruitment is of most importance to keep up and are issues that the unions and the employers discusses and involves bargaining.
- The **unions** fear increased control and surveillance of work processes, quality and time efficiency and workers sometimes feel frustrated with slow and troublesome implementation of DAD – they have to learn by doing.



# Discussion

## Speakers:

- **Daniel Hellkvist**, *Central "ombudsman", IF Metall (TU) , Sweden*
- **Patrik Sandgren**, *Research, Innovation and Industrial Development Officer, Teknikföretagen (Technology Industries of Sweden, EO)*
- **Zoran Marković**, *President, SSMS - Independent Union of Metalworkers of Serbia*
- **Dragan Matić**, *President, ISS - Industrial Trade Union of Serbia*
- **Zoltán Szőke**, *Expert-consultant, Vasas - Metalworkers Union Federation, Hungary*
- **Emil Drevsfeldt Nielsen**, *Consultant, TU Dansk Metal, Denmark*

## Questions:

1. *What is the most important challenge regarding DAD for your organisation?*
2. *What was the most important topic in the past for your organisation related to DAD (especially if it featured in social dialogue/collective bargaining)?*



# BARMETAL

**Digitalisation, automatisisation and decarbonisation in  
the metal industry  
Evidence and comparative findings from Denmark,  
Hungary, Serbia, and Sweden**

**THANK YOU FOR YOUR ATTENTION!**



**Co-funded by  
the European Union**

This project has received funding from the European Union's Social Prerogative and Specific Competencies Lines (SOCPL) programme under grant agreement No. 101052331

# Digitalization, Automatization and Decarbonization (DAD): Opportunity for strengthening collective bargaining in the metal sector

## Mutual Learning Event

June 17, 2024, 10:00-12:30 CET  
(online)

### Agenda

- 10.00 – 10.05 **Opening and introduction** (Monika Martišková, Charles University)
- 10.05 – 10.15 **General challenges related to DAD** in Europe and in the perspective of Germany and the V4 countries (Gerhard Bosch, University of Duisburg-Essen)
- 10.15 – 10.25 **Responses of collective bargaining to the DAD challenges** - introduction of the BARMETAL project (Marta Kahancová, Central European Labour Studies Institute - CELSI)
- 10.25 – 11.15 **Panel discussion** by stakeholders - state of collective bargaining on DAD in the 4 countries (Monika Martišková, Charles University)
- Panelists:**
- Martin Čech (Trade union OZ KOVO Slovakia and KIA Motors)
  - Stefan Solle (Gesamtmetall, Office Brussels)
  - Grzegorz Pietrzykowski (NSZZ Solidarnosc)
  - Michal Hrubý (Škoda Auto University)
- 11.15 – 12.05 **Panel discussion** by stakeholders – policy recommendations for the future of social dialogue (Barbara Surdykowska, Institute for Public Affairs/Instytut Spraw Publicznych)
- Panelists:**
- Ivo Navalný (OS KOVO Czechia)
  - Uwe Fink (IG Metall, Dept. of Collective Bargaining)
  - Marcin Witaszek (Polish Automotive Industry Association)
  - Paulína Pokorná (labor market and employment specialist, Association of Industrial Unions and Transport SK)
- 12.05 – 12.25 **Discussion**
- 12.25 – 12.30 **Summary and closing** (Marta Kahancová, Central European Labour Studies Institute - CELSI)



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Project No. 101052331

# BARMETAL





# BARMETAL



**Digitalization, automatization and decarbonization (DAD):**

**An opportunity for strengthening collective bargaining  
in the metal sector**

**Mutual Learning Event**



# *Mutual Learning Event Agenda*

- 10.00 – 10.05 Opening and introduction  
(Monika Martišková, Charles University, Czechia)
- 10.05 – 10.20 General challenges related to DAD in Europe and in the regional perspective of Germany and the V4 countries  
(Gerhard Bosch, University Duisburg–Essen, Germany)
- 10.20 – 10.40 Responses of collective bargaining to the DAD challenges – introduction of the BARMETAL project  
(Marta Kahancová, Central European Labour Studies Institute, Slovakia)
- 10.40 – 11.30 Panel 1 – Stakeholder discussion on the state of collective bargaining on DAD in the 4 countries  
(moderated by Monika Martišková, Charles University, Czechia)
- 11.30 – 12.20 Panel 2 – Stakeholder discussion on policy recommendations for strengthening social dialogue  
(moderated by Barbara Surdykowska, Institute for Public Affairs, Poland)
- 12.20 – 12.30 Closing  
(Marta Kahancová, Central European Labour Studies Institute, Slovakia)



# BARMETAL



**Digitalization, automatization and decarbonization (DAD):**

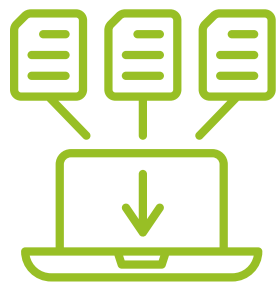
**An opportunity for strengthening collective bargaining  
in the metal sector**



# Introducing the BARMETAL project



- The European Commission, through its call Improving Expertise in Industrial Relations (SOCPL-2021-IND-REL) promotes analysis and research on industrial relations, at EU level as well as in comparative terms, with the aim of contributing to developing and reinforcing industrial relations in Europe

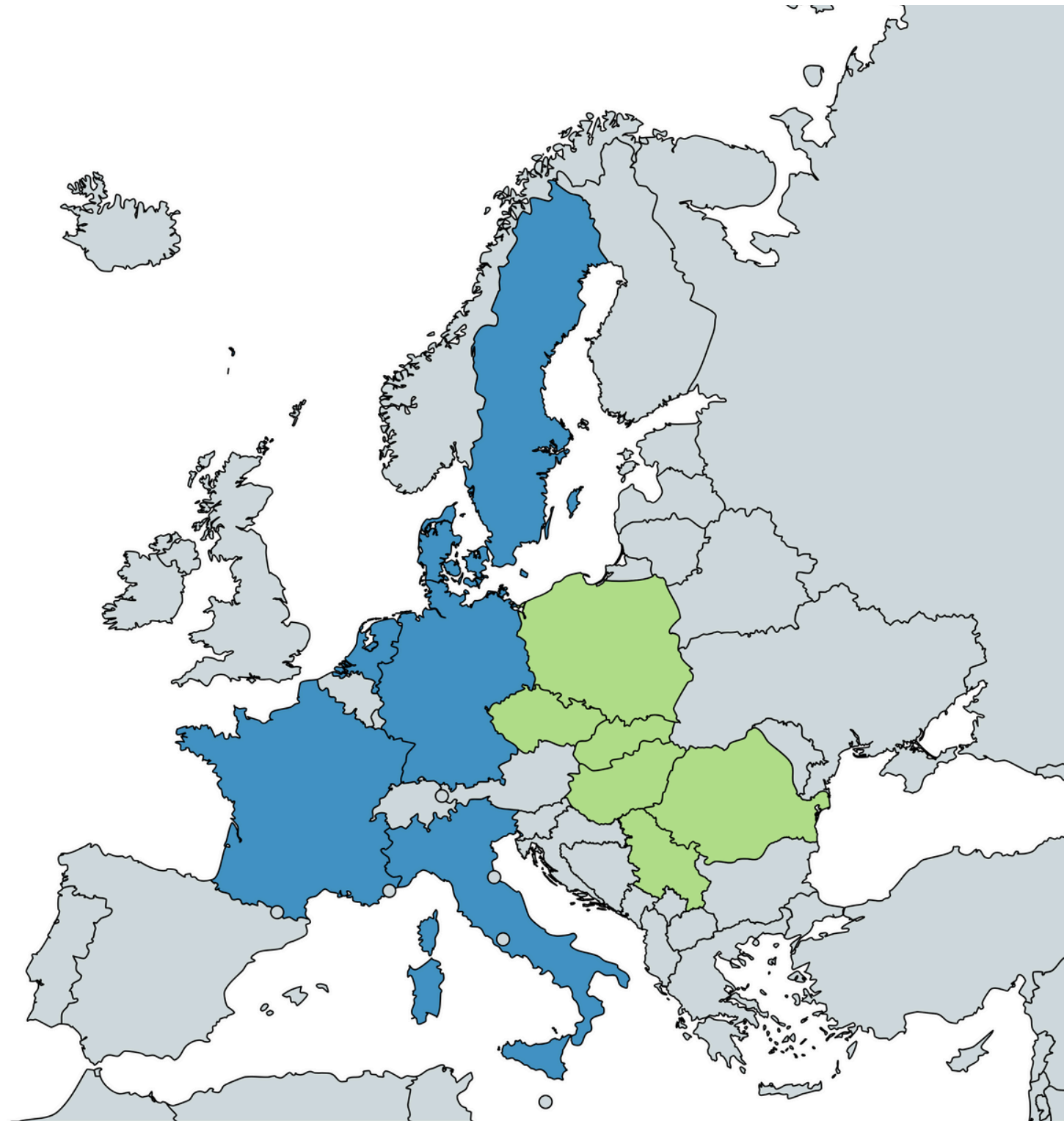


- In response to this call, the general objective of the BARMETAL project is to explore opportunities for strengthening collective bargaining in the metalworking industry (NACE classification sectors C, in particular, C24, C25 and C29) under **digitalization**, **automation** and **decarbonisation**



- The project covers 12 countries – 11 EU Member States and Serbia as a candidate country. A number of studied countries are located in Central and Eastern Europe where the technological transformations are expected to be hardest, while the collective bargaining infrastructure the weakest in Europe

# Introducing the BARMETAL project



- Context: Technological/societal transformation (Germany) vs. integrated periphery (Pavlínek 2020; 2023)
  - Export-oriented countries
  - **Germany** – innovations high on the agenda of industry and social partners
  - **CEE** – low labour cost production, but geographic proximity to large and exclusive markets in core regions of Western Europe
  - high degree of foreign ownership and control
  - export-oriented high-volume production focusing on standardised cars and generic automotive components
  - low-volume production of niche-market vehicles
  - weak presence of high value-added and strategic functions
  - FDI and business-friendly state policies
  - weak trade unions
  - more liberal labour codes and more flexible labour practices

# Comparative findings: *Collective bargaining and the DAD challenge*

- Germany – both unions and employers are active in the DAD topics, joint identification of challenges, addressing them via bargaining
- Little sectoral coordination due to lack capacities (CZ) or engagement (SK) or institutional mechanisms of sectoral level influence (Poland): company level, but limited to large companies, high in the value chain
- Sectoral social partners at best attempt to influence legislation – e.g. decarbonisation policy EURO 7 in Czechia – employers: lobbying for regulation/investments more common
- Company level social dialogue about DAD is formal or eroding: information exchange but little to no influence over decisions,
- Employees lack info on DAD processes
- Challenge: limited organisation and collective representation of workers (also concerns highly skilled ones)
- Risks for social dialogue: social partnership neglected as arena for addressing the challenge
- Opportunities:
  - Home-country effect (e.g. Germany as an investor),
  - EU-level policy effect (Directive on MW and CB, EU level industrial policies, regional multistakeholder dialogues)

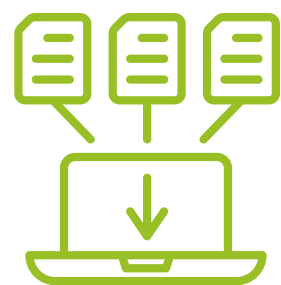


# Collective bargaining and the DAD challenge

## Good practices:

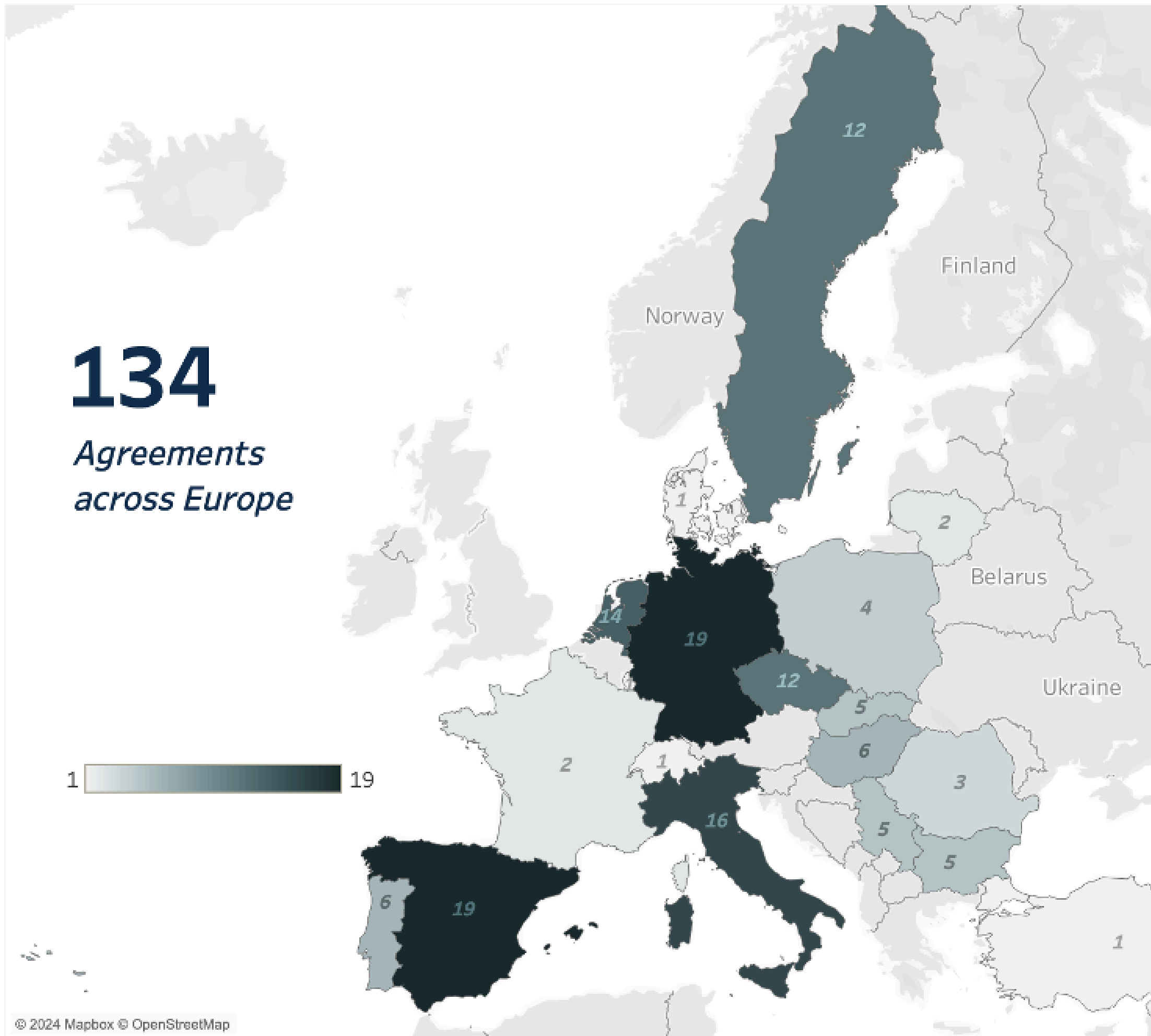


- DE: Future-oriented collective agreements (to address a variety of challenges), 27 regional transformation networks financed by the government's Future Fund for the Automotive Industry, legislation on training allowance for companies particularly affected by the transformation
- SK: Sector-specific cooperation platforms among social partners (beyond traditional social dialogue structures)
- CZ: policy level – decarbonisation policy EURO7 (political lobbying preempts bargaining)
- PL: taking the German Industry 4.0 as a benchmark for developing a similar strategy also in Poland



## Recommendations:

- Need for mezzo level coordination in reskilling policies similar to DE
- Overcoming the high autonomy of employers in labour use strategies including requalification and education
- Regional coordination in regions undergoing transformation where social partners are part of the multi-stakeholders dialogue (a way how to bring social partners into the debate)

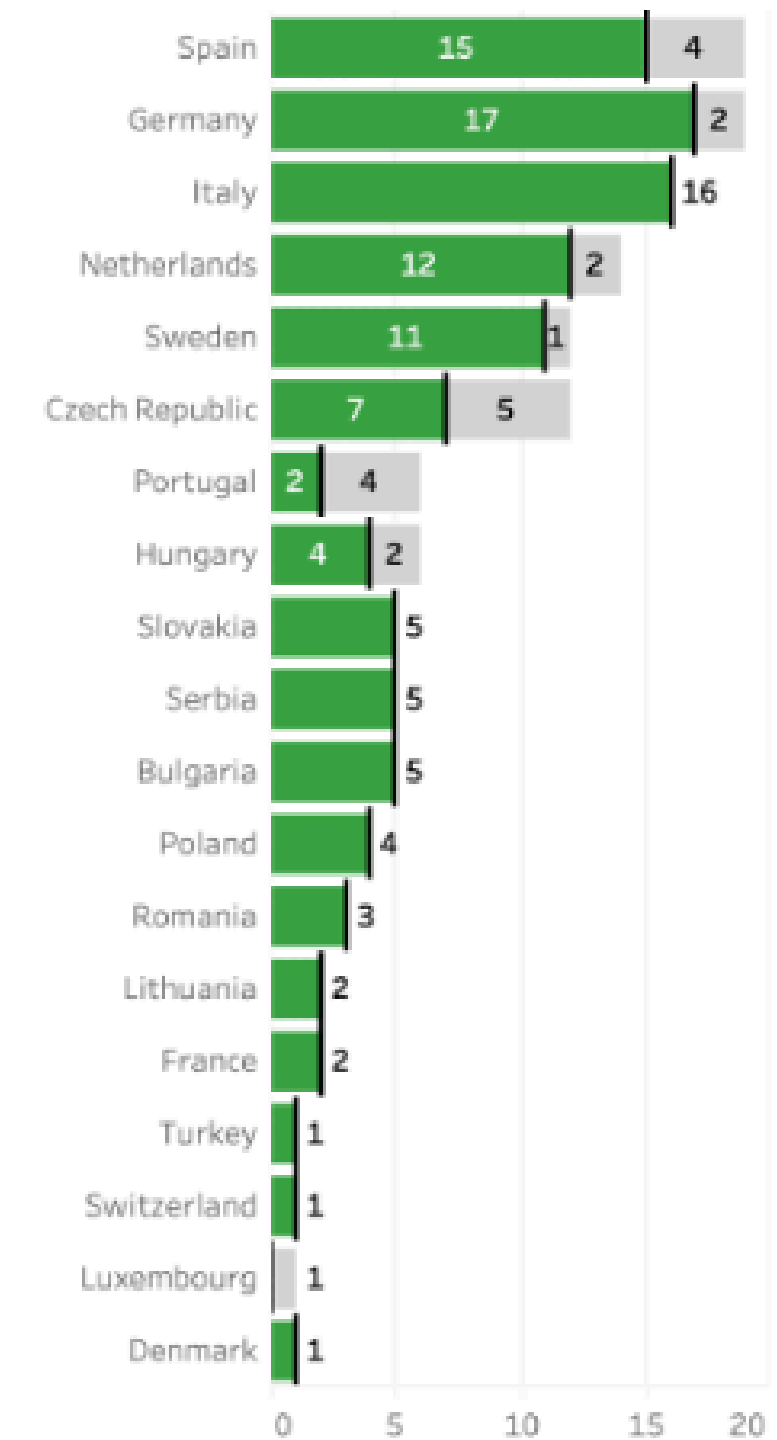


Spain	19
Germany	19
Italy	16
Netherlands	14
Sweden	12
Czech Republic	12
Portugal	6
Hungary	6
Slovakia	5
Serbia	5
Bulgaria	5
Poland	4
Romania	3
Lithuania	2
France	2
Turkey	1
Switzerland	1
Luxembourg	1
Denmark	1

2400	Manufacture of basic metals
2500	Manufacture of fabricated metal products, except machinery and equipment
2600	Manufacture of computer, electronic and optical products
2700	Manufacture of electrical equipment
2800	Manufacture of machinery and equipment
2900	Manufacture of motor vehicles, trailers and semi-trailers

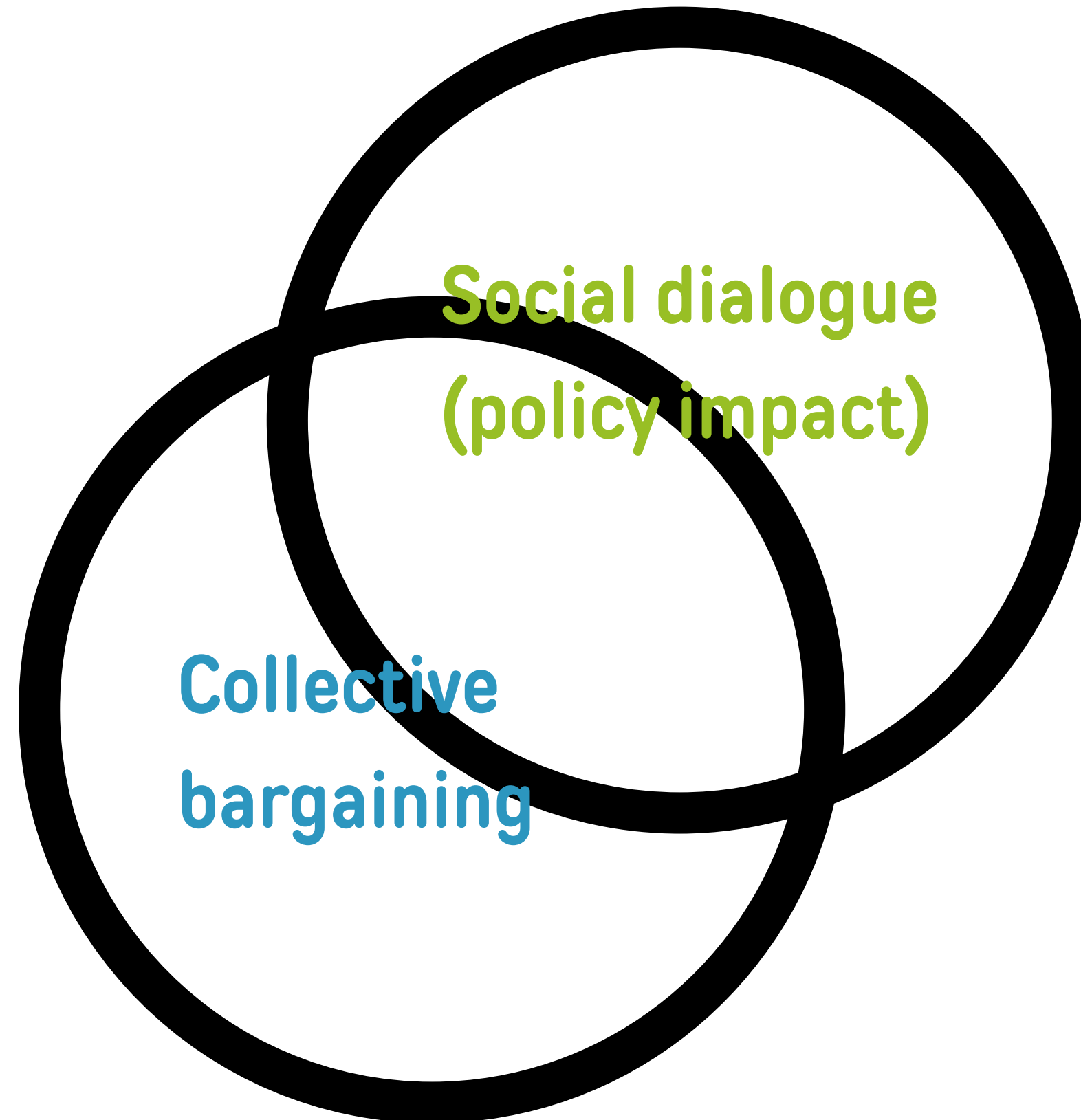
Source: WageIndicator Collective Agreements Database (2024)

# Training stipulations in collective agreements



Source: WageIndicator Collective Agreements Database (2024)

# Conclusions: invitation to a panel discussion



## *Panel 1: Collective bargaining and DAD*

Moderator: *Monika Martišková, Charles University, Czechia*

Stefan Solle, Gesamtmetall, Germany

Martin Čech, Trade union OZ Kovo, Slovakia

Gregorz Pietrzykowski, NSZZ Solidarnosc, Poland

Michal Hrubý, expert from Škoda Auto University, Czechia



## *Panel 1: Collective bargaining and DAD*

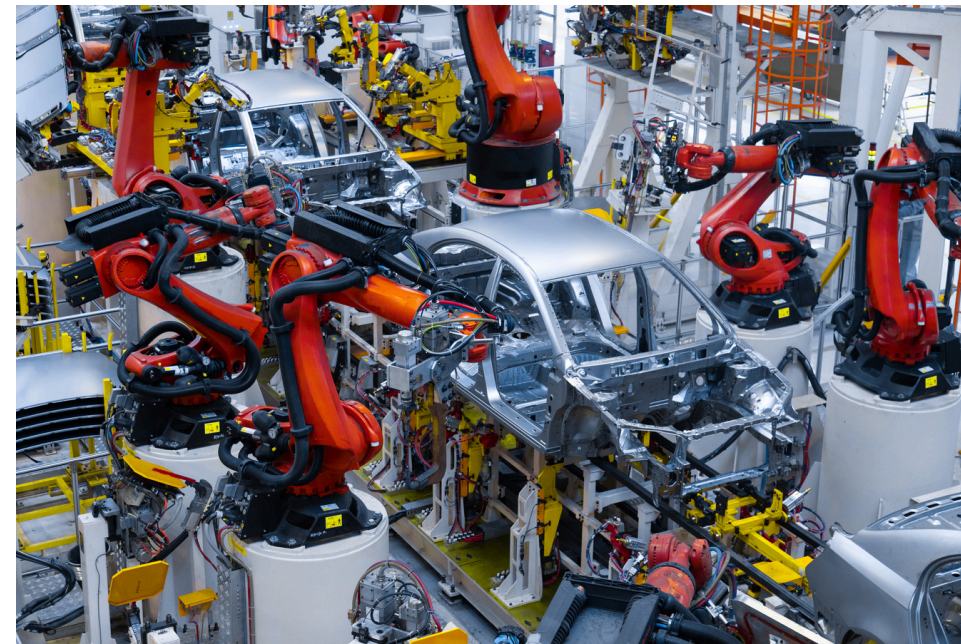
Moderator: *Monika Martišková, Charles University, Czechia*

- Do the companies organized in Gesamtmetall in **Germany** see collective agreements and co-determination as a resource for better coping with digitalization and decarbonization?
- Which topics, eg training/reskilling etc. could be addressed by collective bargaining, instead of the current unilateral and scattered employer strategies in **Slovakia**?
- Is there a chance to establish a sectoral collective agreement in **Poland**? Which topics could be covered to start with?
- Similar to Poland, in **Czechia** collective bargaining is not the mechanism to address DAD challenges. Are there any prospects at least for more social dialogue in the sector? Are there any topics which need to be addressed by both social partners?

# Panel 1: Collective bargaining and DAD

Moderator: Monika Martišková, Charles University, Czechia

- Many employees need further training in the course of digitalization and decarbonization. Is the metal industry in your country prepared for this task?
- And within what framework will collective bargaining be the main platform where reskilling is set?



# *Panel 2: Policy impact and social dialogue emerging from DAD*

Moderator: Barbara Surdykowska, Institute for Public Affairs, Poland

Uwe Fink, IG Metall, Germany



Paulína Pokorná, Association of Industry Federations and Transport, Slovakia

Ivo Navalný, OS KOVO, Czechia



Jakub Faryś, Polish Association of the Automotive Industry, Poland





## *Panel 2: Policy impact and social dialogue emerging from DAD*

Moderator: Barbara Surdykowska, Institute for Public Affairs Poland

- What do you see as the main challenges in the area of DAD (digitalisation, automation, decarbonisation) in the automotive sector in your country and what role should social dialogue play in relation to this particular challenge that you see as crucial?
- Should a broader dialogue take place alongside the classic social dialogue (trade unions – employers), e.g. with the participation of local government?



# Conclusions and closing

[www.celsi.sk/en/barmetal](http://www.celsi.sk/en/barmetal)





# BARMETAL



With financial support of the EU  
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# IAQ

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## General Challenges related to DAD in Europe and in the regional perspective of Germany and the V3 countries

Barmetal Mutual Learning Event June 17, 10-12.30 CET

Gerhard Bosch, IAQ University Duisburg-Essen

# DAD has a strong impact on the manufacturing industry

- The 4 countries in our panel
  - strong manufacturing industry (**share in % of GDP: CZ 31,2%, DE 26.6%, PL 29,3%, SK 27,5 %**)
  - in all four countries the automotive industry **most important** subsector
  - main difference: CZ, PL and SK belong to the “integrated periphery in the automotive industry” with high foreign ownership, DE has its own OEMs
- Therefore CZ, PL, SK “production hubs” with high shares of blue-collar workers, DE higher shares of highly skilled employees, concentration of strategic services like R&D and high value-added products in countries of origin of the OEM
- Digitalization not new - has productivity effects but despite this employment was growing in the last decade in all countries – slight decrease in recent years in CZ and PL
- The European Green Deal includes a target to reduce transport-related greenhouse gas emissions by 90 % by **2050**.
  - DAD major challenge in the next decades: **Project for several generations**

# Impacts of DAD on employees

- No fear of jobless growth - instead in all four countries labor and skill shortages
  - but regional job losses due to the elimination of certain products and components  
**(especially combustion engines, also in in other sectors e.g. coal and lignite)**
- Mostly blue-collar workers but also highly qualified production engineers affected
- Job losses can only be avoided if those affected receive further training and are placed within the company or externally
- **Just transition** in the common interest of employers, employees and the state:
  - necessary to ensure acceptance among employees,
  - avoid labor shortages and costly unemployment
- Long-term technological transformation requires planning lead time: this gives *time for early information* of all parties involved and planning of further training and replacements
  - In practice, however, company case studies often **show late information** about investments

## Ressources for the transition: Who is paying?

- Substantial country differences in investments in R&D in % of GDP: **CZ 2,0 %**, **DE 3,13 %**, **PL 1,43 %**, **SK 0,92 %**, **EU 2,16 %**
- Stronger state support in DE for retraining: Labor market policy expenditures for retraining in % of GDP: **CZ 0,01%**, **DE 0,18%**; **PL 0,01%** , **SK 0,01%** - Individualisation of costs: disadvantage for the low skilled and SMEs
- Technology transfer and transfer of training programs (e.g. Volkswagen battery academy) within OEMs but not necessarily to SMEs
- Regional networks and regional training centers crucial for transfer to SME's: Germany: 27 regional networks financed through the Automotive Industry Future Fund

# New skill requirements

- **DAD project for several generations:** education and initial training as important as retraining
- Main trends:
  - Higher skill requirements – less demand for unskilled workers
  - Tasks of skilled workers rarely characterized solely by metalworking, electrical engineering or information technology: new qualification profiles, in which several domains and existing occupations are combined
  - New skills in battery production: high-voltage electricians (licensed training)
  - But not everybody has to be retrained: many skills transferable
- **Revision of occupational profiles:** More organized in the German dual system of apprenticeship by the social partners, starting in SK in sectoral committees and in CZ in Committee for Retraining and Further Education .....
- Qualification requirements will continue to change: Necessary **continuous modernization** of the training contents in coming decades



## Conclusions

- Manufacturing core sector in all 4 countries. Successful **implementation of DAD prerequisite for future competitiveness.**
- DAD can only succeed with **clear political decisions** that guide investment decisions of companies
- Many locations of OEMs and suppliers feel **informed too late** by headquarters of OEMs
- The costs of the transformation of companies are mainly borne by the companies that also benefit from them – transfer within companies across borders
- **State support** for retraining, replacement and technology transfer to SME's necessary
- Skill requirements and updating of training contents only **with social partners** successful

# Digitalization, Automatization and Decarbonization: Opportunity for strengthening collective bargaining in the metal sector



## Mutual Learning Event

12 June 2024, 14:00-16:00  
CET (online)

## Agenda

- 14:00 – 14:05 **Opening and introduction**  
Maria Enrica Virgillito, *Sant'Anna School of Advanced Studies*
- 14:05 – 14:30 **General challenges related to DAD in Europe & Responses of collective bargaining to the DAD challenges in Italy, France, the Netherlands and Romania**  
Italy – Armanda Cetrulo, *Sant'Anna School of Advanced Studies*  
France – Angelo Moro, *Sant'Anna School of Advanced Studies*  
The Netherlands – Fiona Dragstra, *WageIndicator*  
Romania – Alina Popescu, *Bucharest University of Economic Studies*
- 14:30 – 15.15 **Panel discussion** by social partners, researchers and other stakeholders from each country  
**Panelists:**  
Davide Bubbico, *University of Salerno*  
Juan Sebastian Carbonell, *GERPISA, University Paris-Saclay*  
Petru Dandea, *Cartel Alfa & European Economic and Social Committee*  
Benoît Ostertag, *CFDT Métallurgie*  
Serena Rugiero, *Fondazione Giuseppe Di Vittorio, CGIL*
- 15:15 – 15:45 **Open discussion**
- 15:45 – 16:00 **Summary and closing**



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Project No. 101052331

# BARMETAL



# BARMETAL



## Digitalisation, automation and decarbonisation in the Dutch metal sector

Fiona Dragstra - WageIndicator Foundation  
12 June 2024

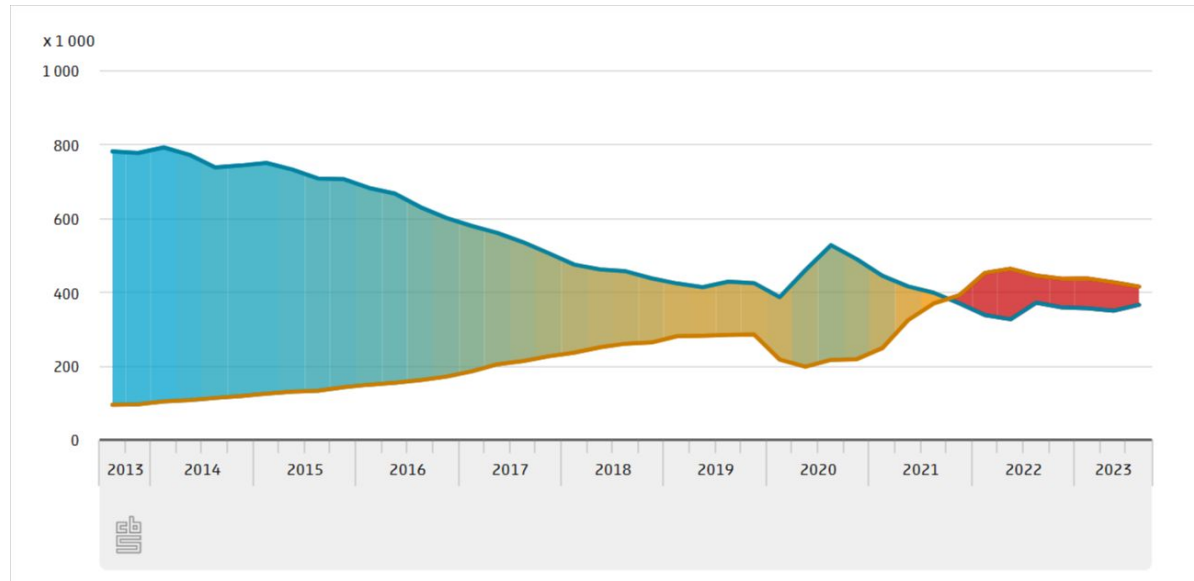


# Labour market and industrial relations

	<b>Companies</b>	<b>Employees</b>	<b>Percentage employees/ working population</b>
<i>All economic activities</i>	2,151,195	8,941,800	100%
C. Manufacturing	78,800	784,000	8.7%
C24. Manufacture of basic metals	405	20,400	0.2%
C25. Manufacture of fabricated metal products, except machinery and equipment	14,445	88,800	1.0%
C29. Manufacture of motor vehicles, trailers and semi-trailers	805	23,100	0.3%

# Labour market and industrial relations

- Labour shortages nationally and in the metal sector



# Labour market and industrial relations

- 76% bargaining coverage nationally
- Trade unions and employers bargain mainly on sectoral level
- Collective agreements are declared generally binding: they apply to entire sectors

# Developments in digitalisation, automation and decarbonisation

- Developments rather due to laws, labour market and competition than bargaining
- Labour shortages lead to innovation
- Need for reskilling and upskilling
- Decarbonisation happens in products as well as in processes



# Role of collective bargaining and social dialogue

- Training opportunities becoming more important
- When digitalisation, automation and decarbonisation does not lead to layoffs, bargaining is limited
- Social partners look to the government to support and fund the industry

# ► Case study

- Working at assembly lines has changed, so job profiles change
- Bargaining on digitalisation, automation and decarbonisation is limited
- Large role for reskilling and upskilling



# Findings and conclusions

- Digitalisation, automation and decarbonisation are not divisive issues among social partners
- Social partners see the need, partly due to workers shortages
- Among bargaining topics, training opportunities to reskill and upskill workers are the most common
- Decarbonisation is more often a business decision than a bargaining topic

# BARMETAL



**This project has received funding from the European Union's Social Prerogative and Specific Competencies Lines (SOCPL) programme under grant agreement N. 101052331**



**Co-funded by  
the European Union**

# BARMETAL



## Country Report: ROMANIA

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Authors:

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Assoc. prof. Irina ION ([irina.zgreaban@rei.ase.ro](mailto:irina.zgreaban@rei.ase.ro))

## Some Labour Statistics

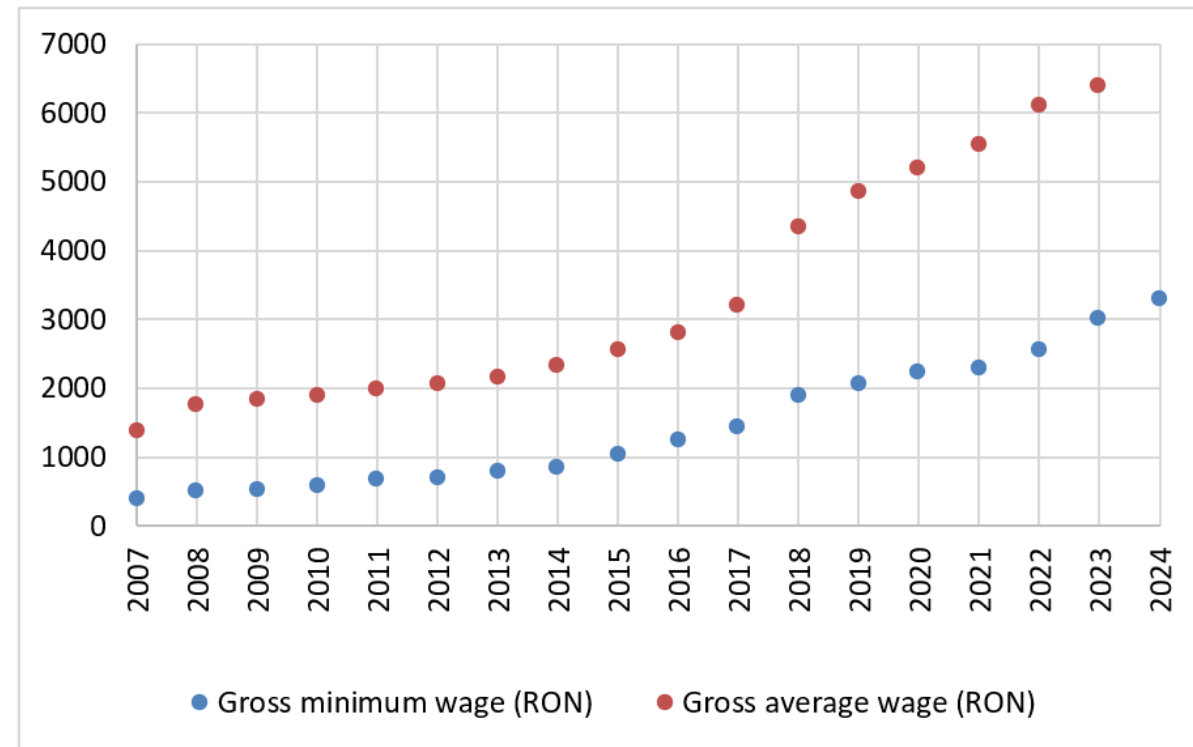
- Population of Romania: 19,778,750 people (2023)
- Total workforce of / in Romania: 5,113,200 workers (2023)
- Romanian workers abroad: 5,700,000 (Ministry of Foreign Affairs, 2022)
- Unemployment rate = 5.44 % (2022), slight decline
- Average monthly gross salary (2022) = 1,225 euro
- The average monthly net salary (2022) = 760 euro
- Youth unemployment rate (2022) = 22.8 %
- Highest NEET rate ("neither in employment nor in education and training") in EU = 19.8% (EC, 2023)
- The job vacancy rate of 0.9% is the lowest in EU (EC, 2023)



# Labour Market Key Characteristics

- Significant labour and skills deficit
- A notable mismatch between the supply and demand for skills
- Increase of flexible work
- Slow pace of digitalization
- Rapid wage growth
  - The technology sector, in particular, has seen significant wage increases as demand for skilled workers in IT and related fields has risen.
  - The government is updating the minimum wage to keep up with inflation. It is estimated that a number of 1,867,000 employees (36.5% of workforce) are paid with the minimum wage in the economy. (Table 3)
- Low labour productivity

Table 3. Evolution of gross minimum and average wages since joining the EU



Sources: National Statistics Institute (2023)<sup>18</sup>; CED (2022)<sup>19</sup>.

# Romania: National Level Overview

## New Law on Social Dialogue (# 367, December, 2022; Amended EGO #42, September, 2023)

- Replaced a restrictive law on social dialogue (# 62/2011)
- In its pursuit of attracting capital and foreign investments, the Romanian government has overlooked the rights of employees to engage in social dialogue
- Adopted mainly in the context of the EU Directive on minimum wages and the intense promotion of collective bargaining on sectorial level at EU level
- The improvement of social dialogue and the establishment of a legal framework for determining minimum wages have been formalized as conditions for receiving funding from the European Commission through the National Plan for Recovery and Resilience.

Table 1. Evolution of main indicators relevant to social dialogue in Romania

Indicators	2000	2020
Trade union density (% of employees)	35	21.4
Employer organizations' density (% of employees)	80	60
Bargaining coverage (% of employees with the right to bargain)	100	15
Predominant level of bargaining	Sectoral level & Company level	



## Romania: National Level Overview

- In March 2023, 58 sectors of collective bargaining were established by Governmental Decision (#171/1.03.2023).
- 5 nationally representative trade union confederations (Table 2)
- 2 nationally representative Employers' unions
  - CONCORDIA
  - The National Council of SMEs
- Employers are not willing to affiliate with federations and confederations. This poses a problem, as social dialogue is conducted between partners of equal standing within a specific sector.

Table 2. Nationally representative trade union confederations in Romania

Confederations	Representativeness
<ul style="list-style-type: none"> <li>• National Trade Union Bloc (BNS)</li> </ul>	It has 30 member federations and trade unions The member federations have a number of 935 trade unions. Represents 280,387 workers (2023), 5.5 % of Romanian workers Covers geographically all 42 counties of Romania
<ul style="list-style-type: none"> <li>• National Confederation of Trade Unions (CNS Cartel Alfa)</li> </ul>	It has 39 member federations and trade unions Covers geographically all 42 counties of Romania Represents 258,099 workers (2019)
<ul style="list-style-type: none"> <li>• National Confederation of Free Trade Unions from Romania (CNSLR Fratia)</li> </ul>	It has 14 member federations and trade unions Covers geographically all 42 counties of Romania Represents 304,842 workers (2020)
<ul style="list-style-type: none"> <li>• Confederation of Democratic Trade Unions in Romania (CSDR)</li> </ul>	It has 20 member federations and trade unions Represents 262,663 workers (2020)
<ul style="list-style-type: none"> <li>• Meridian National Trade Union Confederation (CNS Meridian)</li> </ul>	It has 29 member federations and trade unions Covers geographically 33 counties of Romania Represents 254,280 workers (2020)

# Industrial Relations

- In the last 10 years, industrial relations in Romania have been marked by *shortcomings in the legislative framework*. The quality of industrial relations has been adversely affected by a series of issues, among which we mention:
  - *Inadequate protection for workers* (insufficient protection for workers' rights, unfavourable working conditions, lack of job security, and challenges in addressing workplace grievances).
  - *Insufficient adaptation to changing work environments* (failure to address new forms of employment, technological advancements, or changing industry dynamics).
  - *Legislative voids* (missing legislation / methodological notes for enforcement of legislation).
  - *Limited collective bargaining opportunities*. Until recently, the legislation restricted or inadequately supported collective bargaining between employers and trade unions.
  - *Inconsistent enforcement* (weak and inconsistent enforcement mechanisms, authorities' lack the resources or commitment to enforce industrial relations laws consistently)
  - *Complex and bureaucratic procedures*. This bureaucracy may discourage both employers and employees from engaging in constructive dialogue.
  - *Inadequate consideration of Social Dialogue input* (resulted in laws that do not adequately address the needs of all parties involved).
- Governments *strong orientation towards attracting foreign capital* and their *inability to create jobs* have led to the tilting of the **balance of bargaining power in favour of private employers**, to the detriment of employees and social dialogue. A main consequence is the exodus of labour across the border.

# Industry Level Overview

- *Collective bargaining sectors* (CBS) of interest to this research are: Sector 16 (Metallurgical industry), Sector 17 (Metal construction and machine building industry) and Sector 18 (Automotive and metal construction industry).
- So far, no employer, trade union or federation has registered with the Social Dialogue Commission of the Labour Ministry to conduct collective bargaining in these sectors.
- NACE Sectors C24, C25 and C29 = 5% of the total labour force in Romania

Table 4. Evolution of the number of employees in the metal sector (thousand persons)

<b>NACE category</b>	<b>Dec 2022</b>	<b>May 2023</b>
C24 - Manufacture of basic metals	29.5	29.7
C25 - Manufacture of fabricated metal products, except machinery and equipment	72.4	74.3
C29 - Manufacture of motor vehicles, trailers, and semi-trailers	161.1	163.0
<b>Total</b>	<b>263</b>	<b>267</b>
<b>% of total workforce of the country</b>	<b>5.19</b>	<b>5.22</b>

# Transformative Processes

## Digitalization

### Advances

- High internet penetration rate: 88.9% (2023) (Statista, 2023).
- High mobile phone penetration rate: 145.4 % (2023) (Datareportal, 2023)
- Among the top 20 countries in terms of software development (Business review, 2022)
- Over 200,000 software developers (2023)
- Strong IT education

### Delays:

- e-Governance
- population digital skills

### Policy measures & Actions

- National Cyber Security Strategy (2013)
- eCommerce (2019)
- Electronic Signature (2020)
- Digital Identity System (project, 2020)
- The Ministry of Research, Innovation and Digitalization (2020)
- The Authority for the Digitization of Romania (2020)
- National Interoperability Platform (2022)
- Infrastructures and cloud IT public services (2022)

## Automation

- Low automation degree of industrial production
- Industrial robot density of 21 robots per 10,000 employees (5 times lower than the European average)
- 3,555 industrial robots operating in Romania (2018) #
- The majority of robots in Romania are used in the automotive industry.
- Automation did not determine loss of jobs. Replaced employees were transferred to other positions within the unit.
- Is seen as a positive process that compensates for: the increase in wages in the metal sector, for the relative lack of qualified personnel and the need to assimilate products with high added value into production. It improves working conditions.
- New jobs are emerging due to automation (e.g. operation and maintenance of robotic arms).

## Decarbonisation

- Transition toward green economies
- Just transition (European Commission, 2020)
- The automotive industry needs to keep pace with the transition to the hybrid and full-electric cars in order *to comply with legislation*.
- Electromobility is a major challenge for governments and businesses.
- It creates *new global value chains*. Electric cars require different raw materials and materials, lighter, composite materials, which replace metal. Batteries for electric cars need rare earths, which currently come from China (97%).
- Government employs various strategies *to change consumer behaviour* and stimulate electric mobility: infrastructure development, public fleet electrification programs, zoning & free parking for EVs, environmental taxation.
- *Taxation in relation to environmental issues*: carbon pricing mechanisms, green tax incentives, eco-labelling and tax breaks, renewable energy incentives, plastic taxes, environmental impact reporting requirements, shift from income tax to consumption tax.

Transformative processes (D.A.D.) *have not been the subject of collective bargaining* so far and have not had an impact on the contractual dimension. They are seen as strictly business decisions, which so far have not negatively affected employment. More so, D.A.D. triggered training that increased workers' competences and qualifications.

# Main Benefits & Challenges of DAD in the Automotive Sector

Table 5. Main benefits & challenges of DAD in the automotive sector

	Main benefits	Main challenges
Companies' Perspective	<ul style="list-style-type: none"> <li>• Cost &amp; time optimization</li> <li>• Access to data</li> <li>• Supply chain disruptions</li> <li>• Shortening the decision time</li> <li>• Increased productivity</li> <li>• Production diversification</li> <li>• Access to a wider talent pool</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of competent work force</li> <li>• Retaining trained staff, highly attractive on the labour market</li> <li>• Managing increasing complexity</li> <li>• High dependency on technology and cybersecurity</li> </ul>
Workers' Perspective	<ul style="list-style-type: none"> <li>• Higher productivity</li> <li>• Lower physical effort</li> <li>• Improved operating time</li> <li>• Lower exposure to heavy or dangerous tasks</li> <li>• Contribution to more technologically advanced products and services</li> </ul>	<ul style="list-style-type: none"> <li>• Training / Upskilling / Re-skilling</li> <li>• Developing digital dexterity and mindset</li> <li>• Concerns regarding the possibility of job loss due to production relocalization abroad</li> <li>• Overcontrol</li> <li>• Increased complexity of work</li> <li>• Private life &amp; Right to disconnect</li> </ul>

## Top skills expected to increase due to DAD

### Software utilization

Complex problem solving

### System analysis

Operations & control

Installation

### Instructing

Service orientation

Persuasion

Technology Design

# Proposed Bargaining Adaptations in light of DAD

- **Educate**, create mentality, and raise **awareness** among all social actors for actively engaging in social dialogue;
- **Facilitating dialogue** between the government and social partners to formulate political and legislative measures for social protection;
- **Generating (updated) statistics** regarding the atypical forms of employment / new forms of employment created by digitalization;
- **Reassessing traditional industrial relations** in the new contexts of DAD;
- Exploring **novel organizational approaches** utilizing emerging technologies, such as online coordination of workers;
- Innovating to adapt to these changes through mandatory professional training within Collective Labor Agreements (CCMs) as a right of workers, enabling them to acquire the skills demanded by the digitization of various sectors;
- Ensuring workforce skills through public and private investments, professional information dissemination, lifelong learning initiatives, the exchange of best practices to generalize positive experiences, and the regular updating of educational programs;
- Implementing protective measures to safeguard the personal lives of workers, including restrictions on the widespread availability of workers and the prevention of being contacted at any time;
- Advocating for collective negotiations at all levels, especially within sectors and companies influenced by digitization;