



Changing automotive work environment: Job effects in Germany until 2030

Key results of the study

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Agora
Verkehrswende



Summary of key findings



In total, **the number of jobs in the German automotive work environment will remain constant until 2030**. However, as a result of the **electrification**, there will be a **significant shift of jobs** between the relevant industry sectors.

- Some industry sectors, such as automotive OEMs as well selected suppliers will see a heavy reduction in number of employees (Automotive OEMs: --70,000 jobs, ICE-focused suppliers: up to -95,000 jobs, maintenance and repair industry: --15,000 jobs)
- Other industry sectors, such as ICE-unfocused suppliers will see an increase in employees (~ +95,000 jobs)
- Within the adjacent industries (e.g., energy infrastructure) a strong growth is expected (~ +110,000 jobs) - however, as those industry sectors are currently very small, their importance compared to the core automotive industries will remain low



Consequence: There will be strong **temporal, industry & job-family related** as well as **regional** shifts in the labor market.

- Following overall volume fluctuations (coming from a COVID induced reduction) there will also be a fluctuating demand for employees
- 70,000 jobs will see a completely new occupational field, further 200,000 jobs will undergo a fundamental change. For 500,000 jobs, there will be the need for on-the-job advanced training and education. This will result in substantial resource requirements for the respective companies and employees
- In Eastern Germany, 10 % more jobs will be created. In Southern Germany, the job development will remain constant

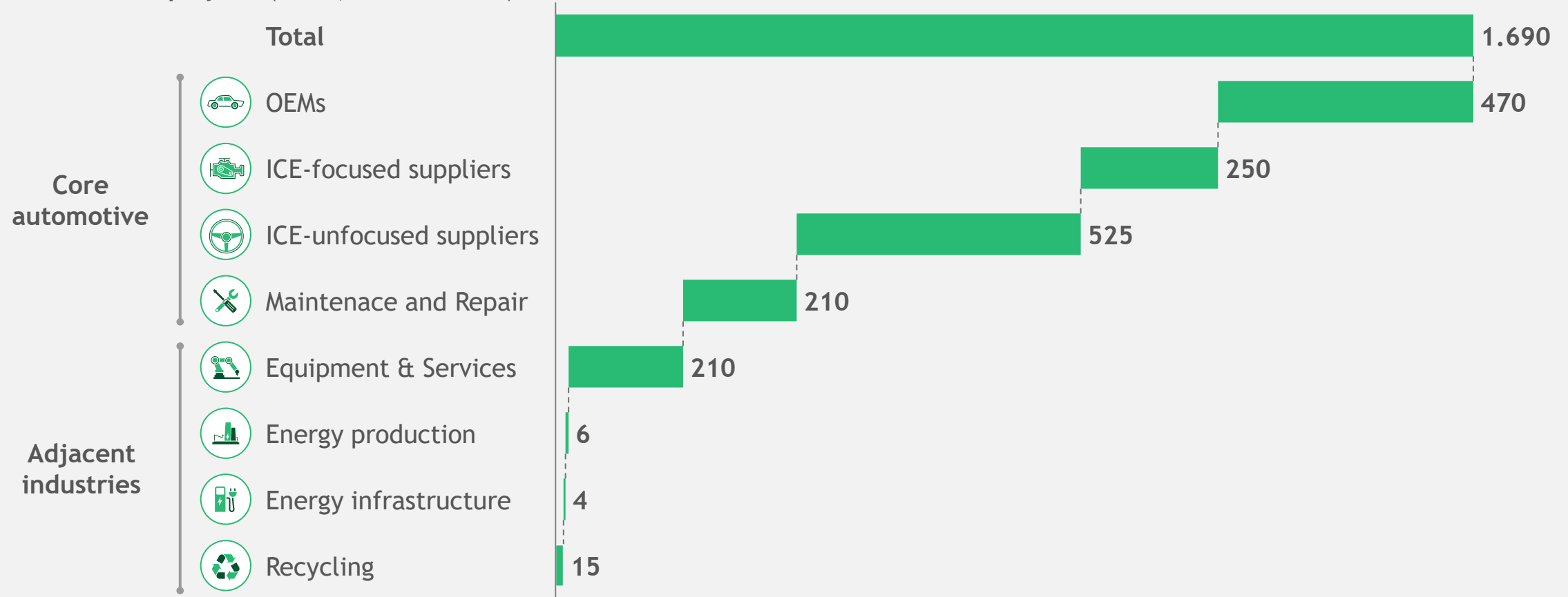


For a successful transformation, **companies as well as politics** are required:

- With regards to timing, companies need to determine the demand for qualification, training and restructuring measures based on their "2030 target picture"
- With regards to the changing scope of work, politics needs to build an appropriate infrastructure to successfully cope with the enormous demand for additional qualification and advanced training
- With regards to the regional perspective, politics should create incentives to stimulate the localization of emerging industries in regions that are negatively affected by the future developments

1.7 million jobs in the automotive work environment spread across eight industries

Number of employees (2019, in thousands)



6 Trends impact employment in considered industries



Market volume

Change in the number of vehicles produced and sold and the resulting vehicle fleet on the roads



Technology evolution

Technological development, especially with regard to the increasing importance of software in the vehicle



Product mix

Distribution of vehicle classes produced across the different price segments (entry vs. premium)



Productivity gains

Increase in productivity, allowing higher output with the same number of employees



Shift to EV

Increase in the share of (fully) electric vehicles within production and sales

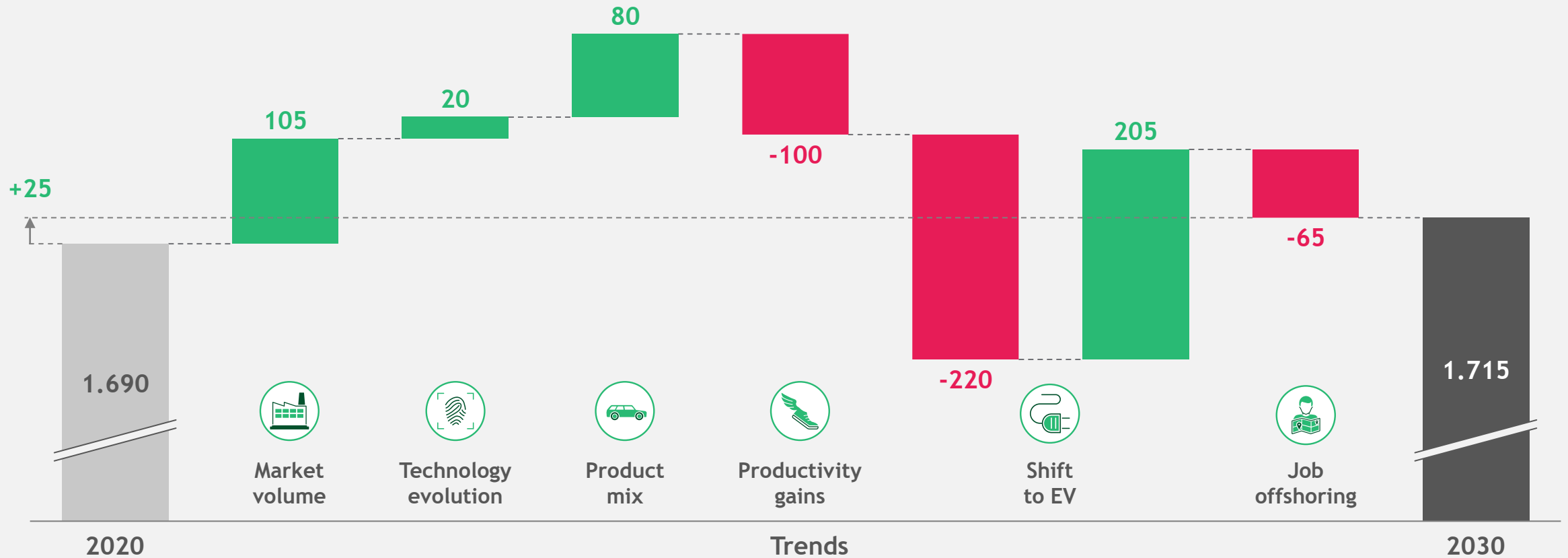


Job offshoring

Offshoring of jobs to other European countries

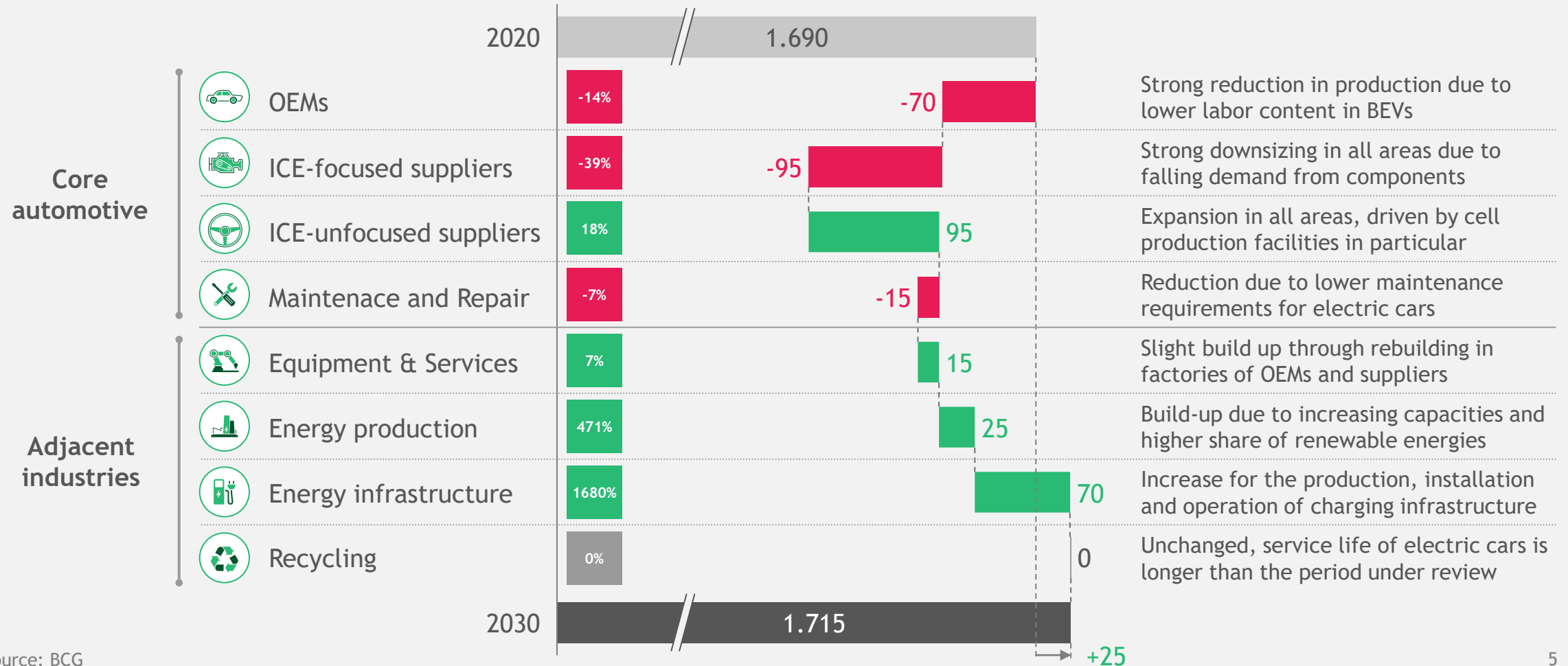
Sum of trends keeps employment stable ...

Job losses and job gains (in thousands) due to various trends



... but leads to significant shifts between industries

Job losses and job gains (in thousands) across different industries





Transition of job positions in 3 perspectives



Transition
over time



Employment needs change
continuously



Transition
between
industries &
job families



~800 thousand jobs have
partly high training
requirements



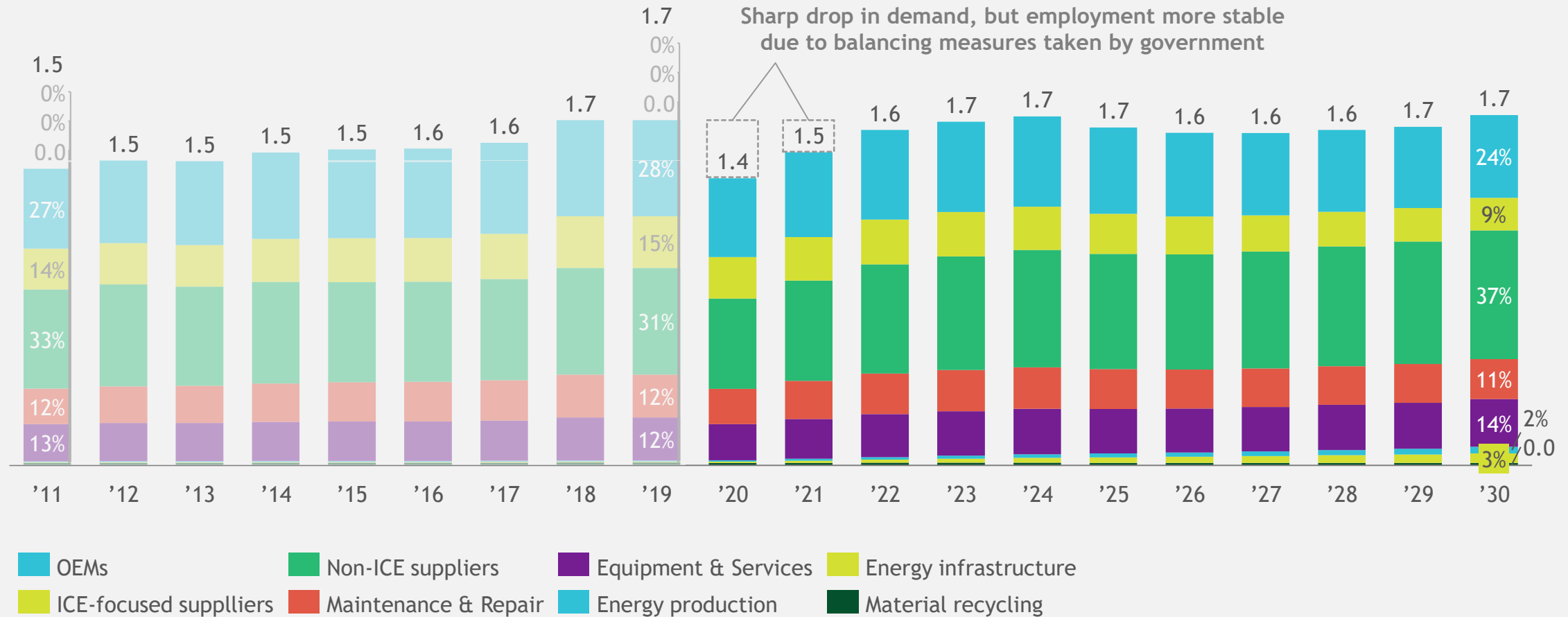
Transition
across regions



Slight regional effects
expected, East Germany
expected to benefit

Employment needs change continuously

Number of workers required (in thousands)



Source: EuroStat; IHS Markit; BCG

800k positions with dedicated training needs

	Same job profile	Similar job profile	New job profile
Situation	Remaining in the company and profession with slightly different requirements	Change to a similar industry and / or job profile	Change to other industry and / or new job profile
Measures	On-the-job training required	Retraining and relocation necessary	Requalification and relocation necessary
Affected positions	~500k	~200k	~70k
Example	<i>Employee final assembly automotive OEM</i>	<i>Employee gearbox production to electric motor assembly</i>	<i>Employee battery cell production</i>

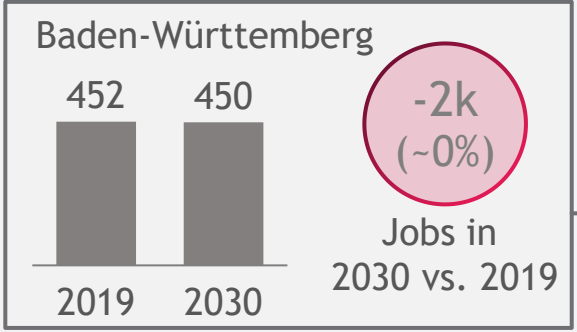
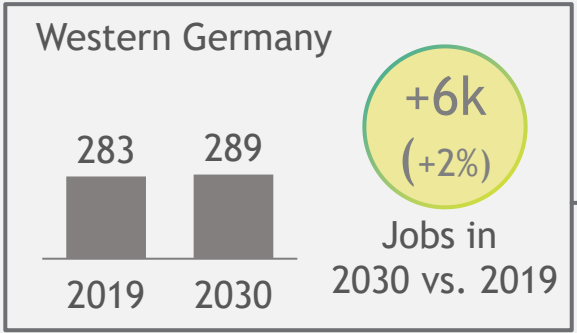
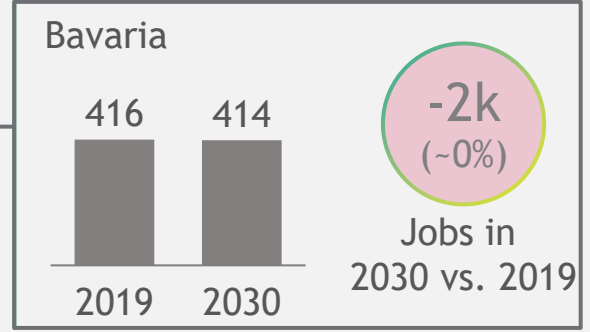
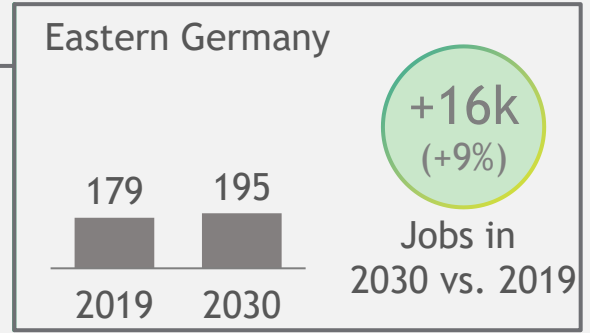
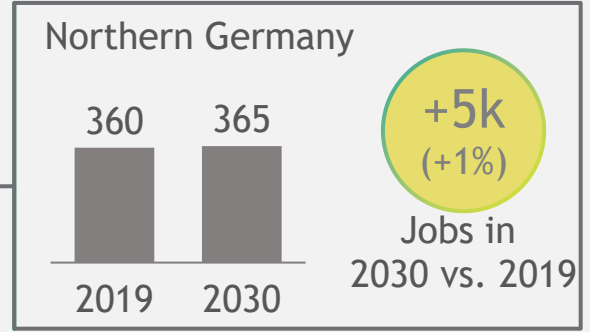
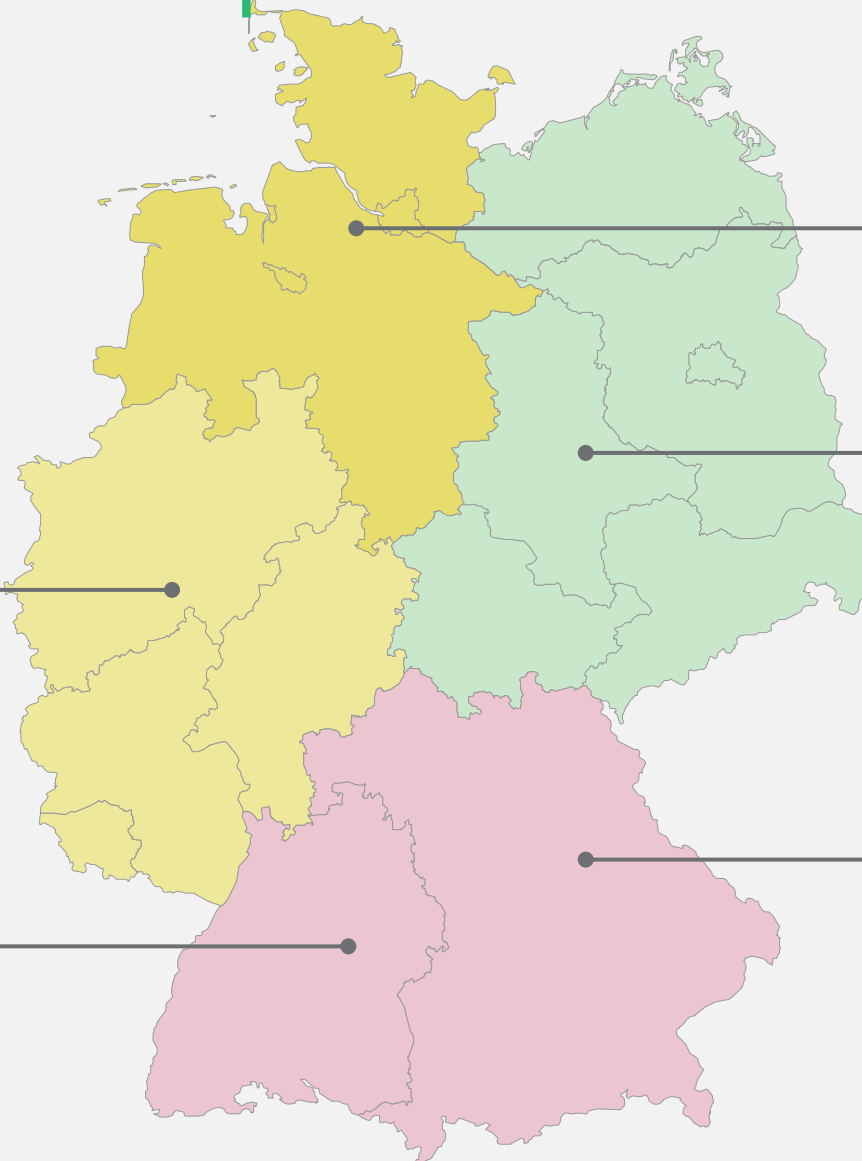
Small regional effects expected in Germany



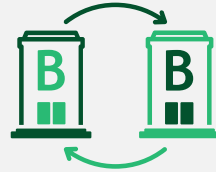
Germany

Regional impact on jobs in Germany [in k]

➤ Differences across regions
due to specific industry structure



Companies & politics should continue to act to master the transition



Companies

Analyze status quo with regards to future product evolutions and demands, operations & job profiles (already done in many places)

Develop a company-specific target picture for 2030, based on a "greenfield" approach - question "make-or-buy" (e.g., battery cell production)

Intensify strategic human resources planning to enable change within the company

Develop retraining and upskilling programs as well as recruitment and restructuring programs



Politics

Create awareness within sectors and companies (especially SMEs) about the upcoming changes and necessary transition

Tailor educational curricula towards new technologies and specifically train job seekers to address them

Conduct strategic workforce planning at the state level to understand supply and demand from a time, regional, and content perspective

Support "matching" of supply and demand for job seekers (e.g., by building an appropriate platform)

Media contacts



Philipp Prein
Head of Communications
Agora Verkehrswende
philipp.prein@agora-verkehrswende.de
+49 30 7001435-305



Veronika Seifried
Media Relations Coordinator
Boston Consulting Group
seifried.veronika@bcg.com
+49 151 6894-1434

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