



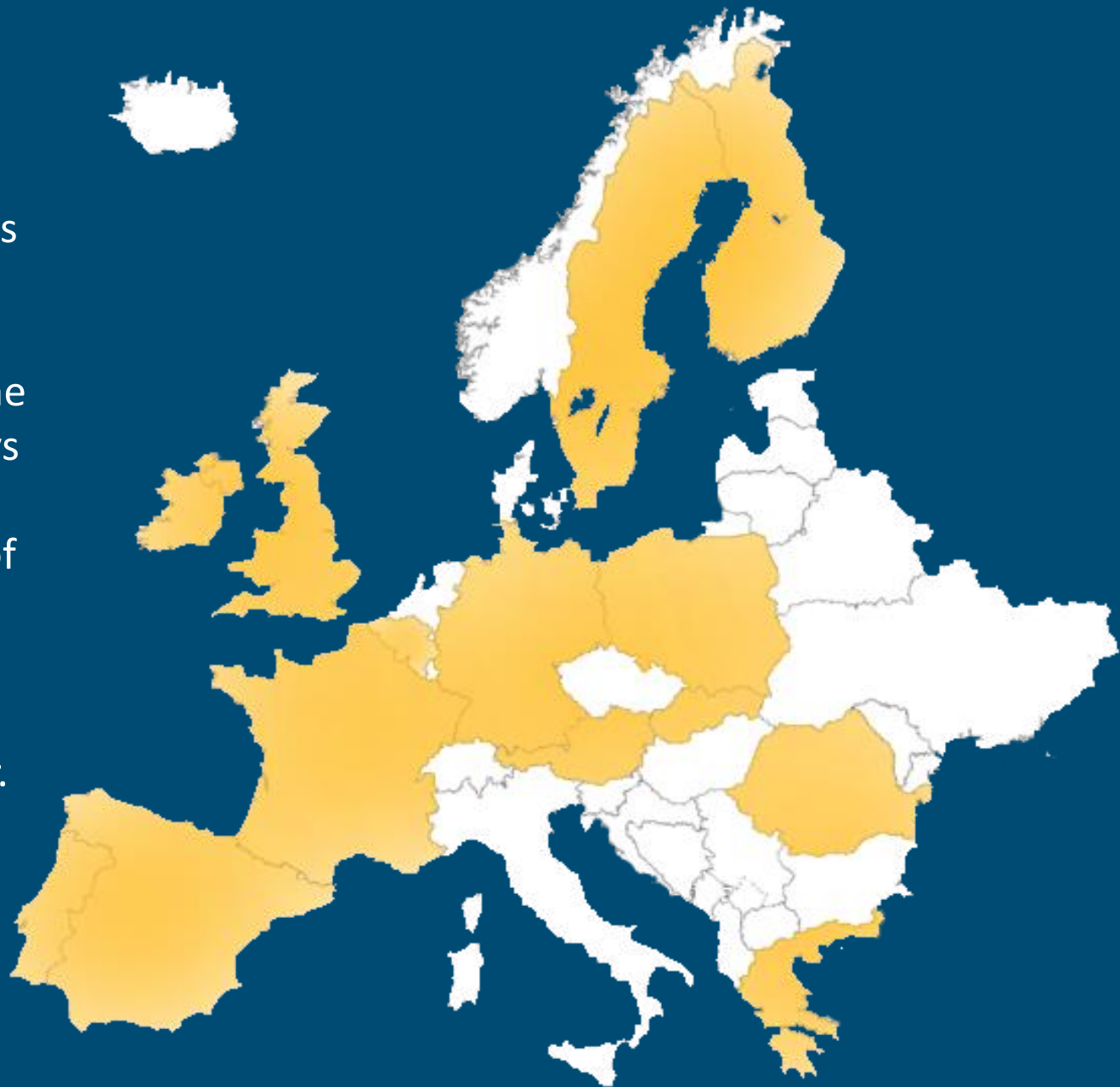
MIREU project – skills and requirements and SLO

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January 30, 2019, Madrid - Spain

The EU project **MIREU** **aims** to establish a network of mining and metallurgy regions across Europe.

The **main objective** of the project is to identify ways to ensure the sustained and sustainable supply of mineral raw materials to the EU and to promote investment, innovation and growth in the sector.



Skills and requirements

1st step: Identification of future mining challenges:

- skills shortage due to technological advancements
- depth of the deposits
- low grade of raw materials
- higher energy cost
- increased environmental limitation.



Oshokoya and Tetteh (2018) states:

Source: <https://www.itpro.co.uk>

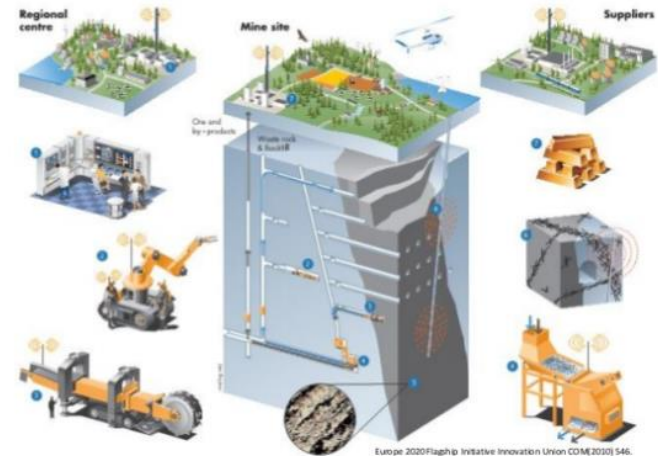
„Despite challenges mining industry will be a major source of employment”

Source: Oshokoya and Tetteh (2018), Guerico et al. (2009)

Skills and requirements

2nd step: Identification of key areas of the mine-of-the future:

- operating practices and technology
- talent and leadership
- partnership with key stakeholders
- governance.



Source: Harraz (Mine of the future)

„Often observed protests against new mines show the lack of social acceptance for mining activities and an increase in the level of democracy. Another challenge for the mining companies and governments will be **public awareness** (for example through the education)”.

Source: Oshokoya and Tetteh (2018)

ASSESSMENT OF SKILLS REQUIREMENTS AND AVAILABILITY IN THE MIREU REGIONS – Country Report - Poland

Deliverable 3.2

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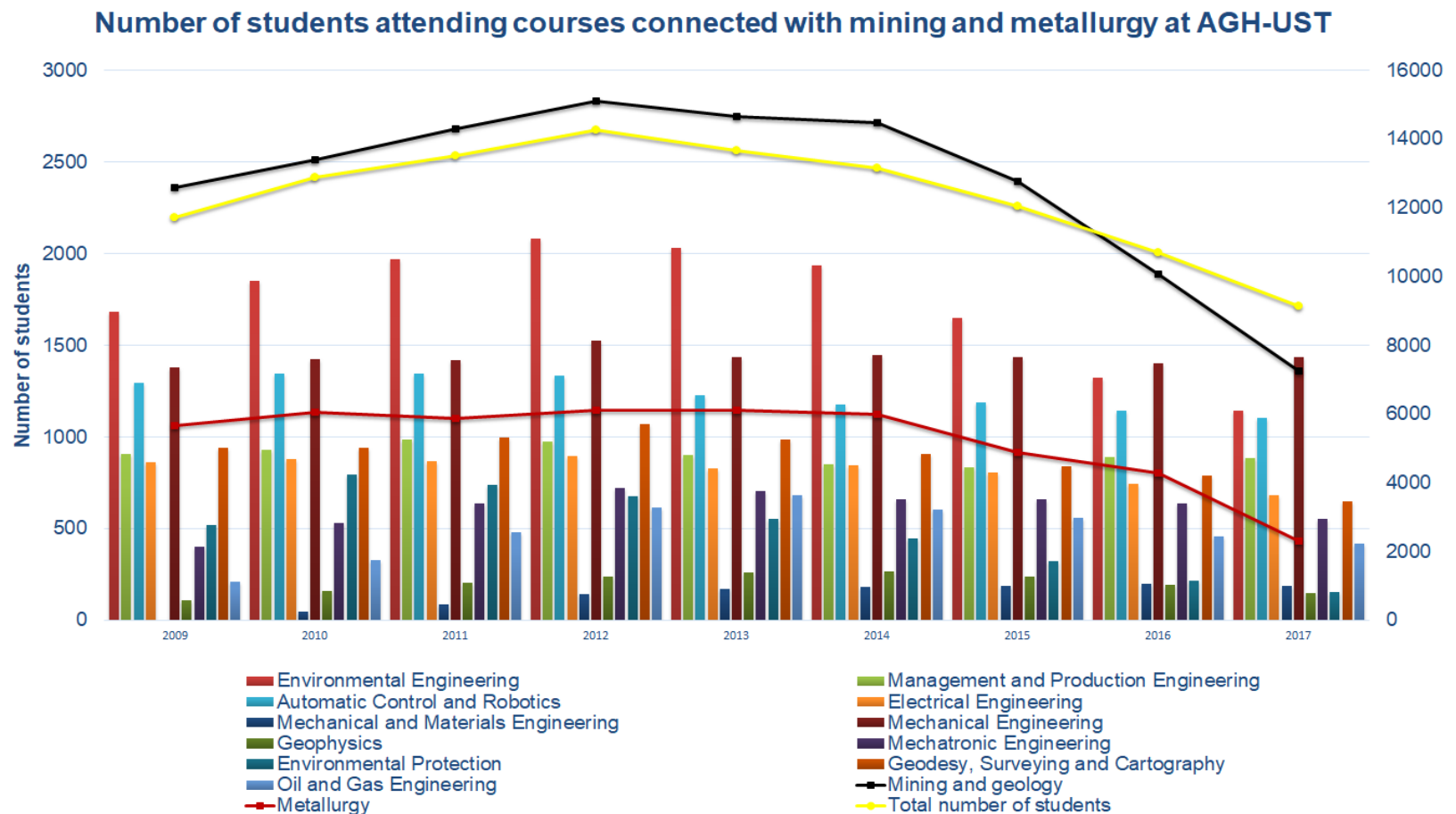
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The **purpose of the report** is a concise overview over the current and likely future specific skills requirements in a modern mining industry.

Finally – common report including trends and recommendation.

National and regional base for acquiring skills



Skills and requirements

3rd step: Analysis of the employment ratio according job offers and to the biggest mining company in The Lower Silesia Region.

No.	Employees category	Number of employees		
		2014	2015	2016
1	board of directors	5	5	5
2	senior management	50	50	54
3	other management staff	560	944	998
4	non-physical workers	4 096	3 742	3 690
5	physical workers	13 457	13 458	13 516
TOTAL		?	?	?

Skills requirements for regulatory and administrative bodies:

1. Regulatory and administrative body:

- **play great role in access to mineral deposits** – e.g. grant decisions which reflect their knowledge, skills and awareness or lack of them
- are **nominated** by President of Poland or **elected** by the community in general elections -> their education and skills is irrelevant
- operates with the help of offices – their staff were subject to **survey** conducted within this report:
 - there is relatively few people with geological and mining education
 - the majority of staff regularly participate in training.

Main conclusions about skills and requirements:

1. Cooperation among vocational schools, mining companies and universities is not well developed.
2. The education system in Poland offers education in the fields of mining, as well as fields related to mining and metallurgy at various levels - the problem is rather the lack of students.
3. There is a need for trained specialists (electricians, ironworkers).
4. Automatization is not going to reduce employment in mining sector significantly.
5. The most expected work force are “gray collar” employees. This conclusion overlaps with a domain problem of global mining.



EDUCATION

Skills

Awareness -> SLO

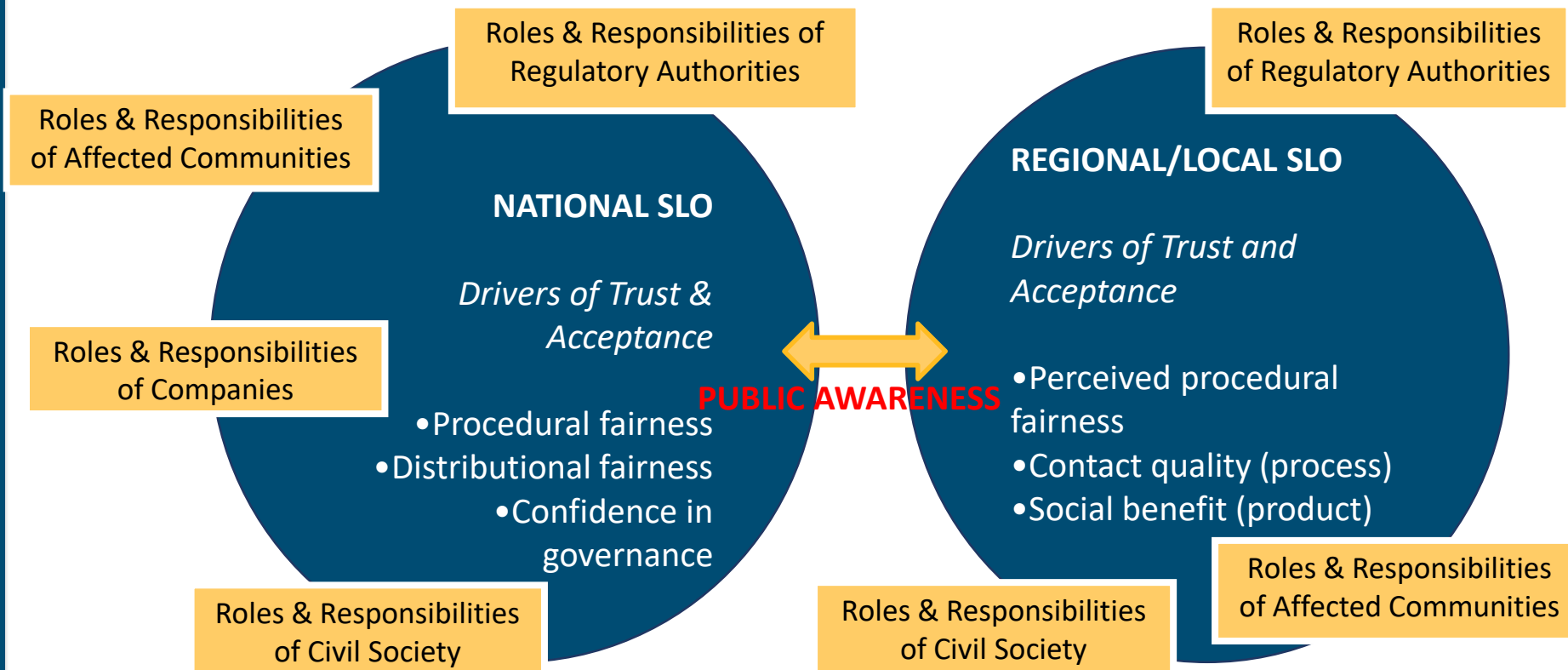
EDUCATION
IS THE MOST
POWERFUL WEAPON
WE CAN USE
TO CHANGE THE WORLD
- NELSON MANDELA



Source: Educational Sponsorship

European Model of SLO

The idea behind the model is that it offers a standardized approach to SLO throughout Europe while simultaneously allowing the differences across regions to remain intact.



In order to obtain acceptance
for mining activities, we have
offered jobs for residents



Participants of Pol-Ger. Forum on Reclamation and Revitalisation visit mining site in the company of representatives of local governments and mining enterprises, 2014

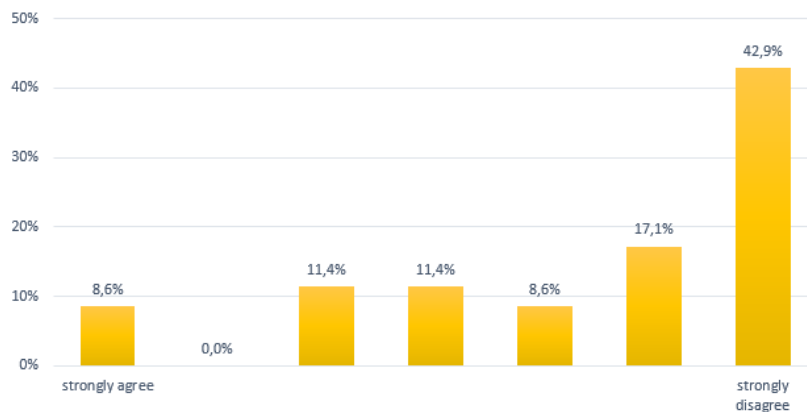
Now we are happy - the residents
have a job and in the near future
will receive a sports attraction on
the heap



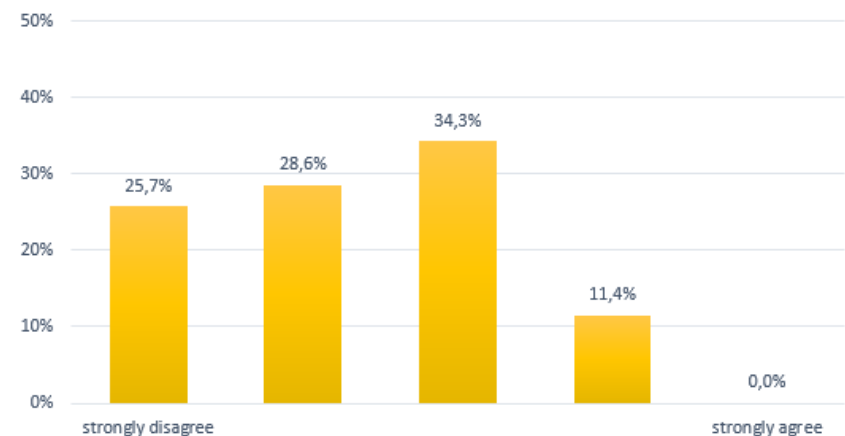
Participants of PL-Ger. Forum on Reclamation and Revitalisation visit mining site in the company of representatives of local governments and mining enterprises , 2014

Social acceptance in mining regions is quite high but not so much at national level

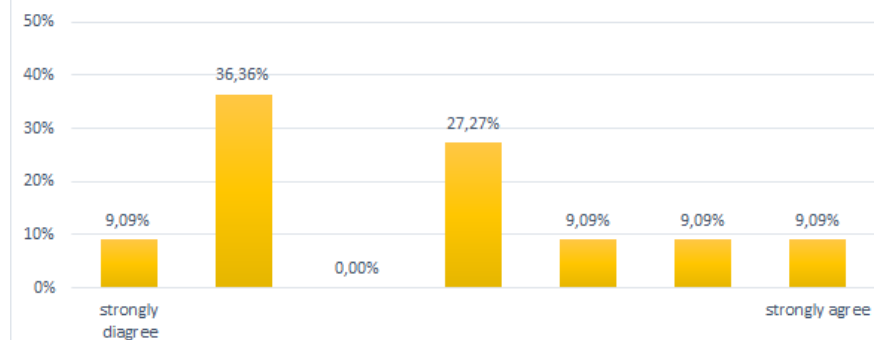
**I do not imagine the region without
KGHM Polska Miedź S.A.**



Company involve us in decision making



**It would disturb me if a new mining infrastructure
was built next to my house (e.g. shaft)**



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Thank you!

