



**IGF**

INTERGOVERNMENTAL FORUM  
on Mining, Minerals, Metals and  
Sustainable Development

# New Tech, New Deal:

Findings and new directions for the changing  
face of mining

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IGF Report Launch Webinar

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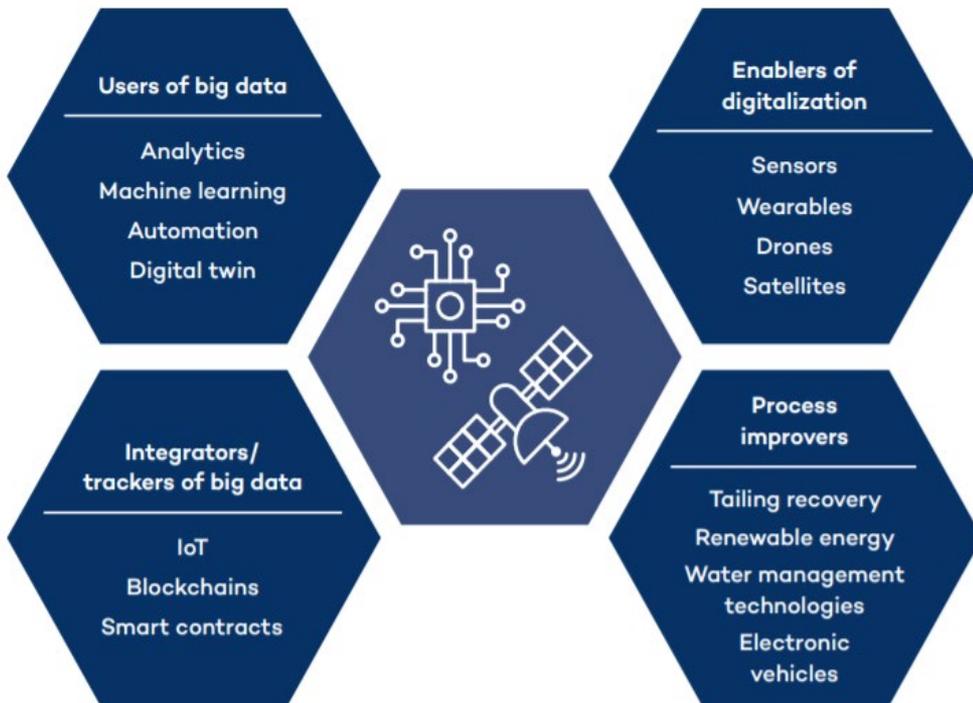


Kingdom of the Netherlands



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# THE COMING NEW TECHNOLOGIES



Source: IGF 2019

## Drivers



*More difficult geology*

*Declining ore deposits*



*Declining productivity*

*H&S of workers*



*Environmental impact*

*Sustainability*

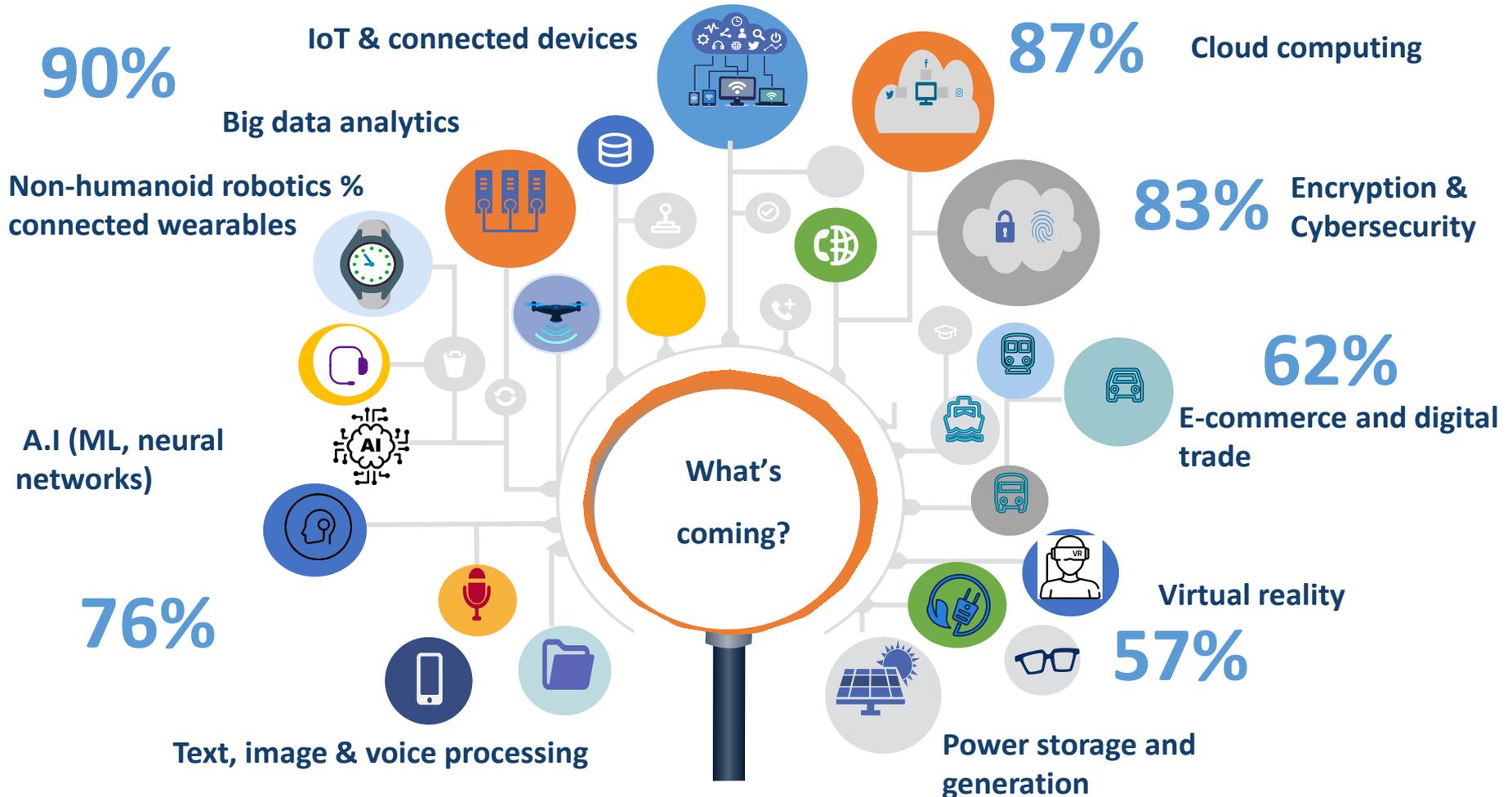


*Fast-tracked by COVID19*



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## TRENDS BY 2025





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## LIKELY IMPACTS: STAKEHOLDERS SPECIFIC

### For mining industry:

- ✓ Improved efficiency (labour; assets; operation)
- ✓ Higher productivity
- ✓ Improved work & workers safety

### For communities:

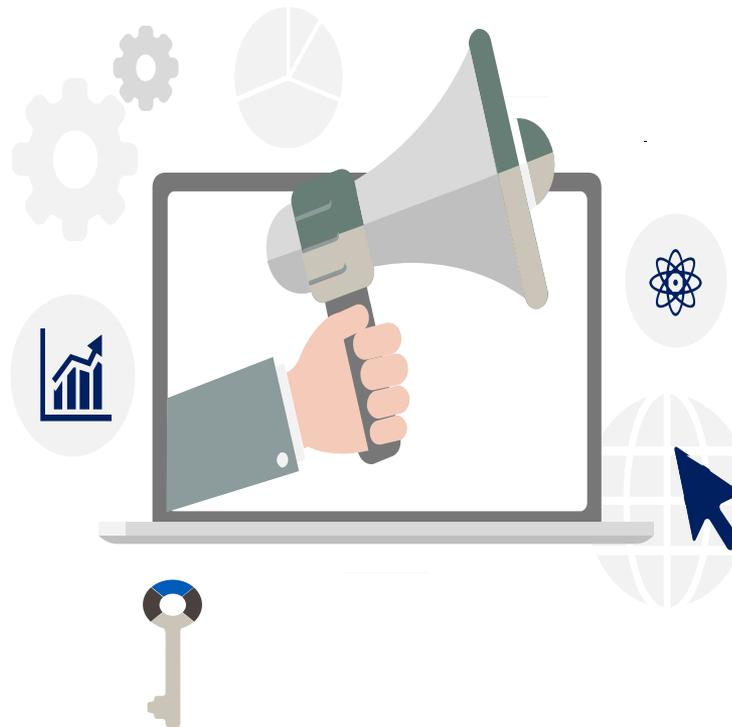
- ✓ Changes in occupations and jobs
- ✓ Ripple effects on local economies
- ✓ Gendered implications

### For Governments:

- ✓ Balance of socio-economic benefits
- ✓ Revenues
- ✓ Possible implications for ASM

### Expect fundamental changes:

- ✓ New actors as strategic investors
- ✓ Innovation and R&D hubs more prominent
- ✓ Different expertise and knowledge needed





# ELEMENTS OF A NEW DEAL



Employment in the mine of the future



Leverage mining for diversification



Improved tax regimes



Technologies as a solution



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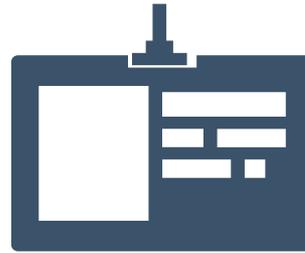
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## 1. EMPLOYMENT



### Skills and education

- ✓ National policies: curricula including basic education + lifelong learning + more STEM
- ✓ (Re/up) skilling and (re) training



### Partnership Approach

- ✓ Need timely info on investment plans, skills needed
- ✓ Partnerships between mining companies & educational institutions



### Supporting policies

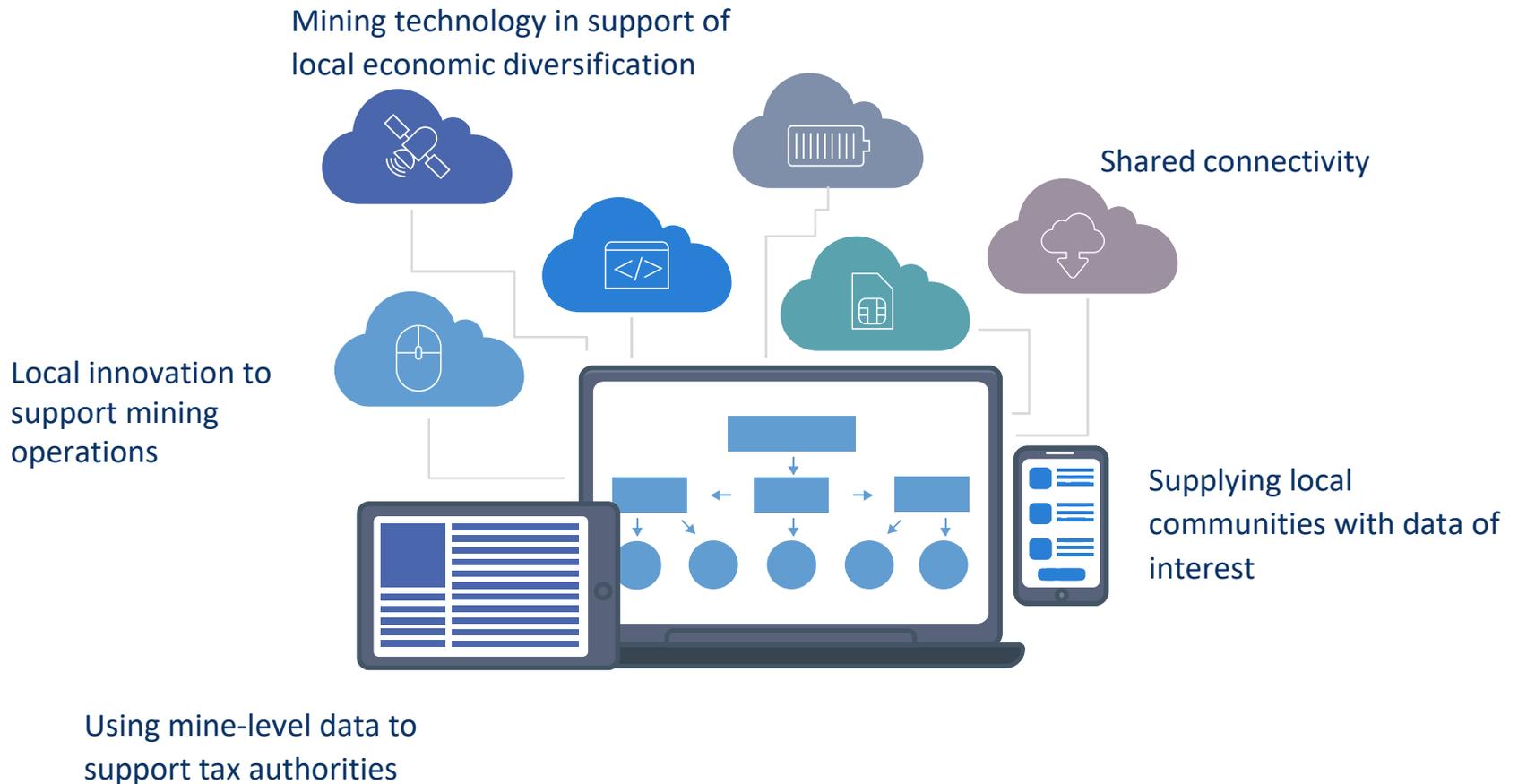
- ✓ Local procurement policies and accompanying supply chain development support
- ✓ Training incentives/mandates

**Need baseline information: skills gaps, curriculum gaps**



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## 2. TECHNOLOGY AS A SOLUTION





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## 3. LEVERAGING MINING FOR DIVERSIFICATION

**POLICY**



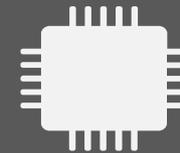
**OPTIONS**



Innovative social  
impact investment  
mechanisms



Local content policies:  
procurement,  
beneficiation



Government-led  
efforts supporting  
transition

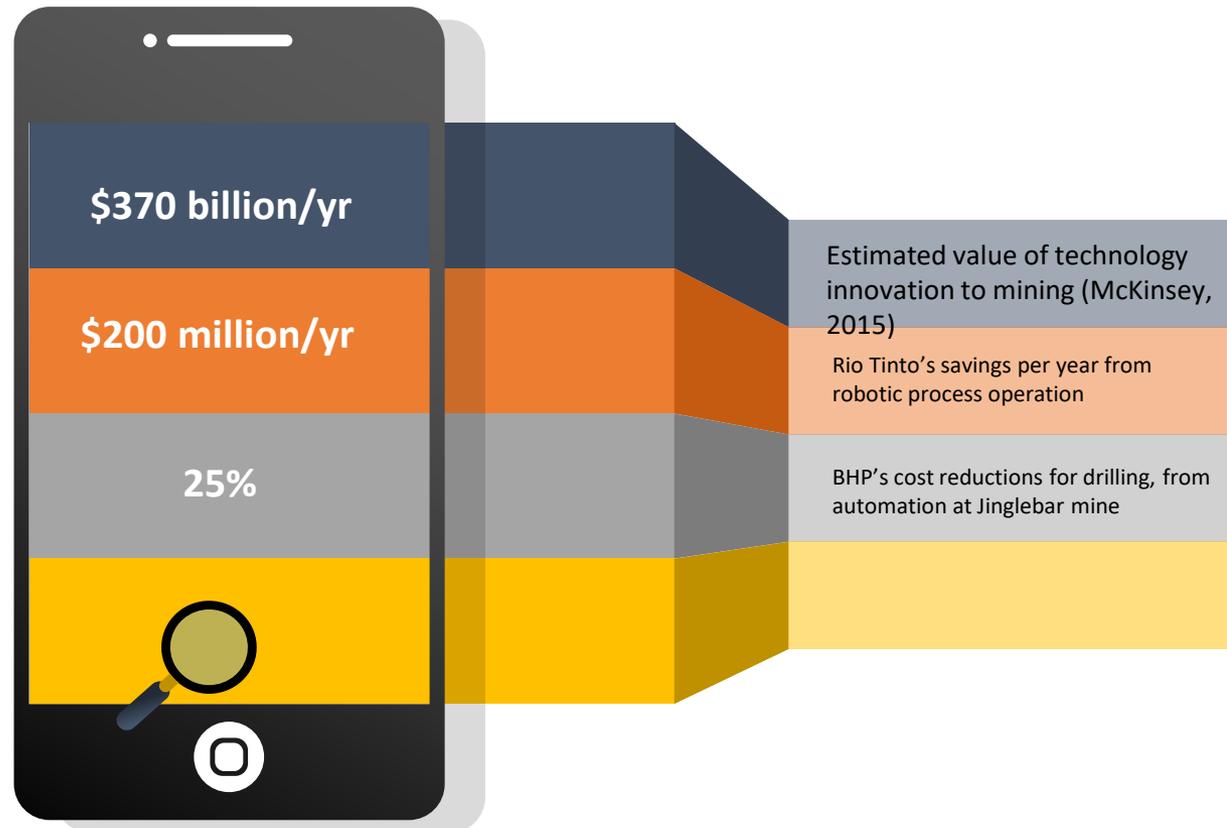


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## 4. IMPROVED TAX REGIMES

Can taxation make up for the loss of employment-related benefits?

- Tax excess profits for benefit of communities, displaced workers
- May be no excess profits to tax



**BUT: Increased taxation can't be the only policy pursued – misses all the other opportunities, collaborations, described above.**



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## CONCLUSIONS



01

### Disruptive changes are coming quickly

- ✓ Governments need to adapt laws, regulations, institutions, fiscal regimes
- ✓ Mining companies need to be proactive on e.g. skills, social investments

02

### Prerequisite for success:

- ✓ Baseline data: job impacts, existing & needed skills
- ✓ Partnership approach: governments, companies, communities/workers

03

### Important to get it right:

- ✓ Development issue
- ✓ Social licence issue.

So much we still don't know.

# THANK YOU

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