

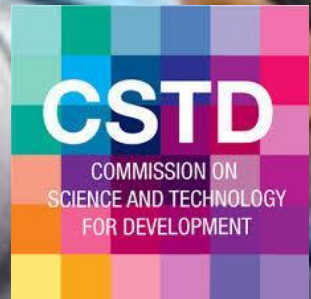
Industry 4.0 for Inclusive Development

Introduction of the Report of the Secretary-General (E/CN.16/2022/2) by the CSTD Secretariat

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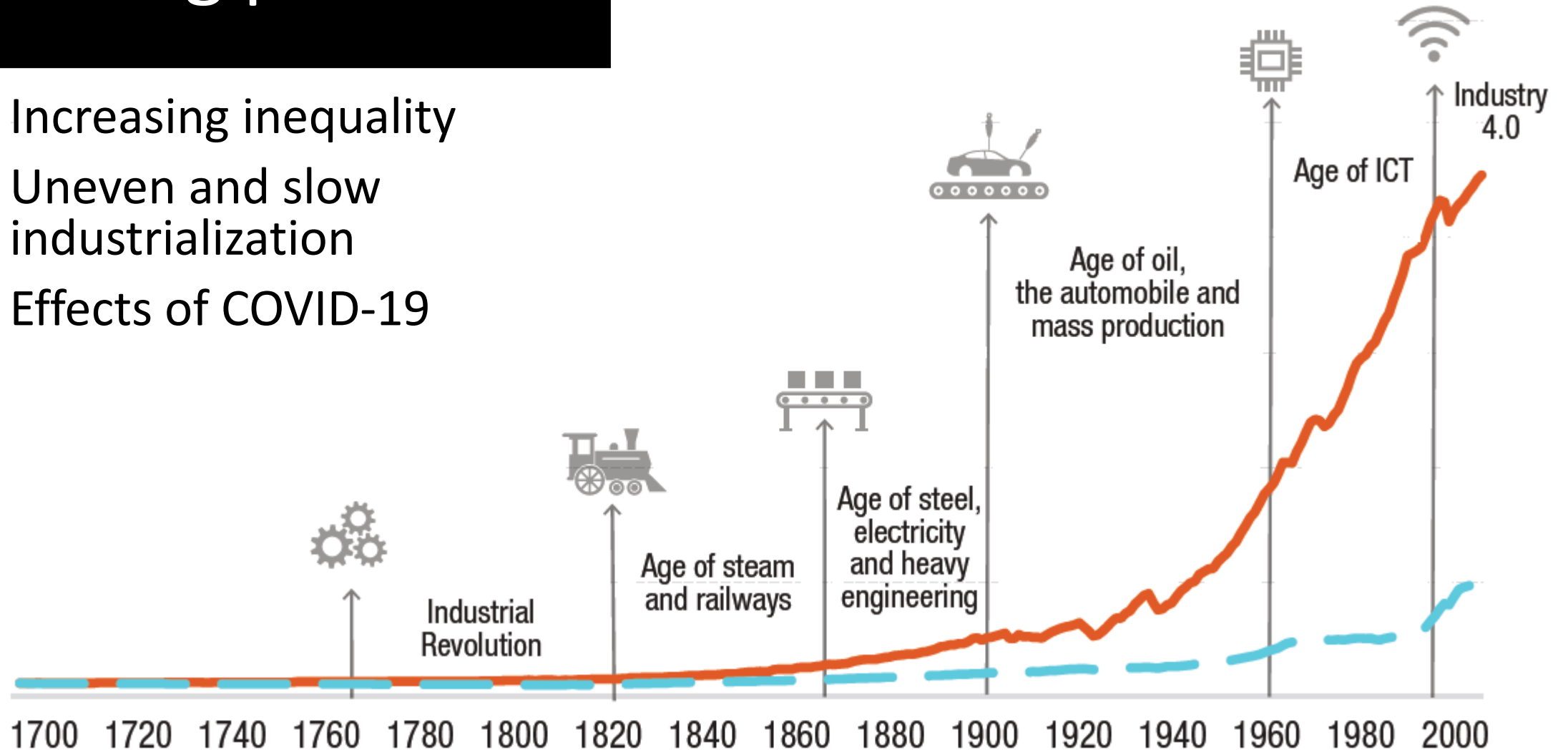
Commission on Science and Technology for
Development (CSTD)

Twenty-fifth session (28 March – 1 April 2022)



The big picture

- Increasing inequality
- Uneven and slow industrialization
- Effects of COVID-19



Industry 4.0

- “Smart” and connected production systems
- Few countries and firms lead the development of Industry 4.0

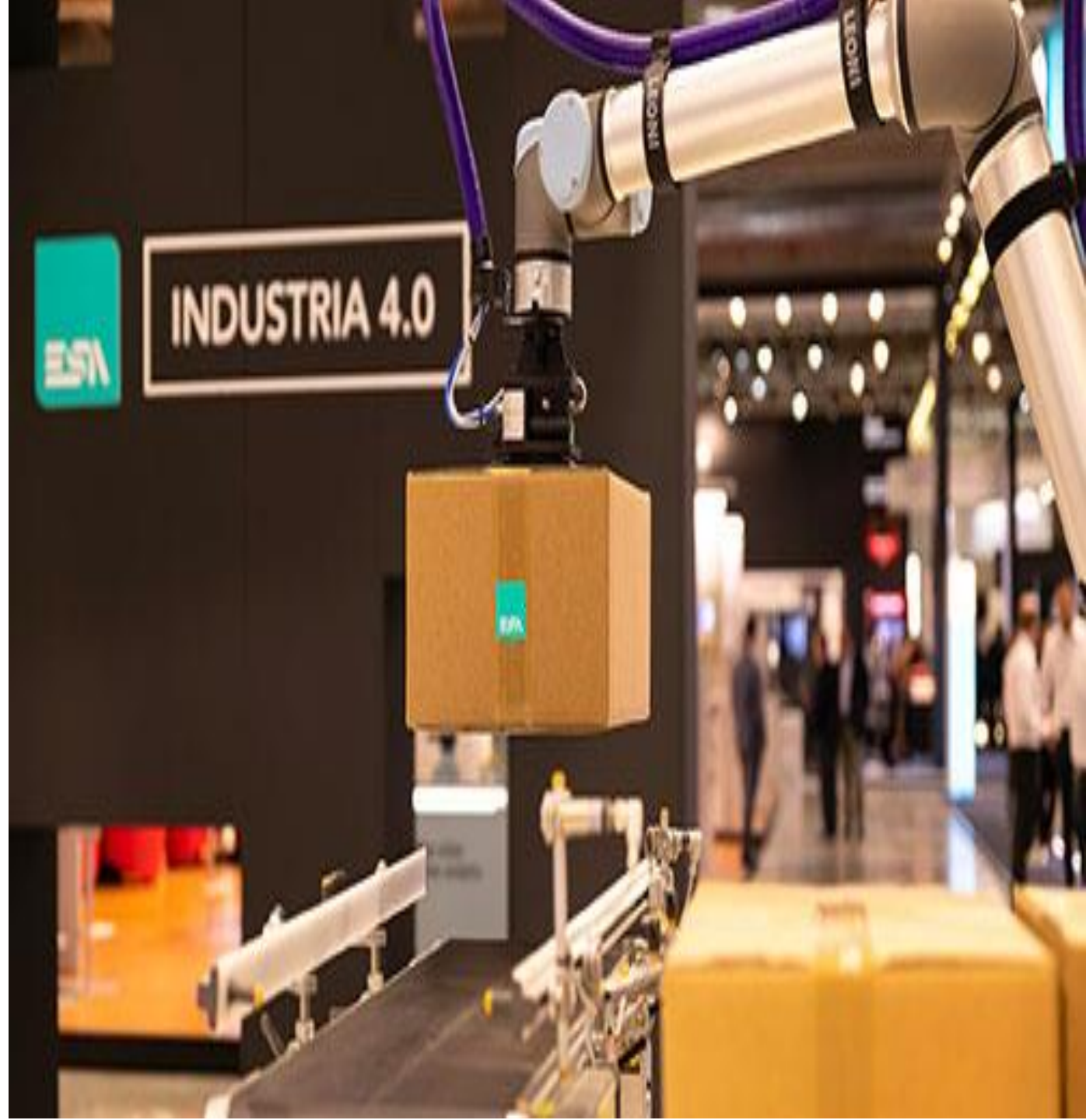


Benefits



Productivity

- Visibility of processes and optimization
- Increase in production line availability by 5 to 15%.

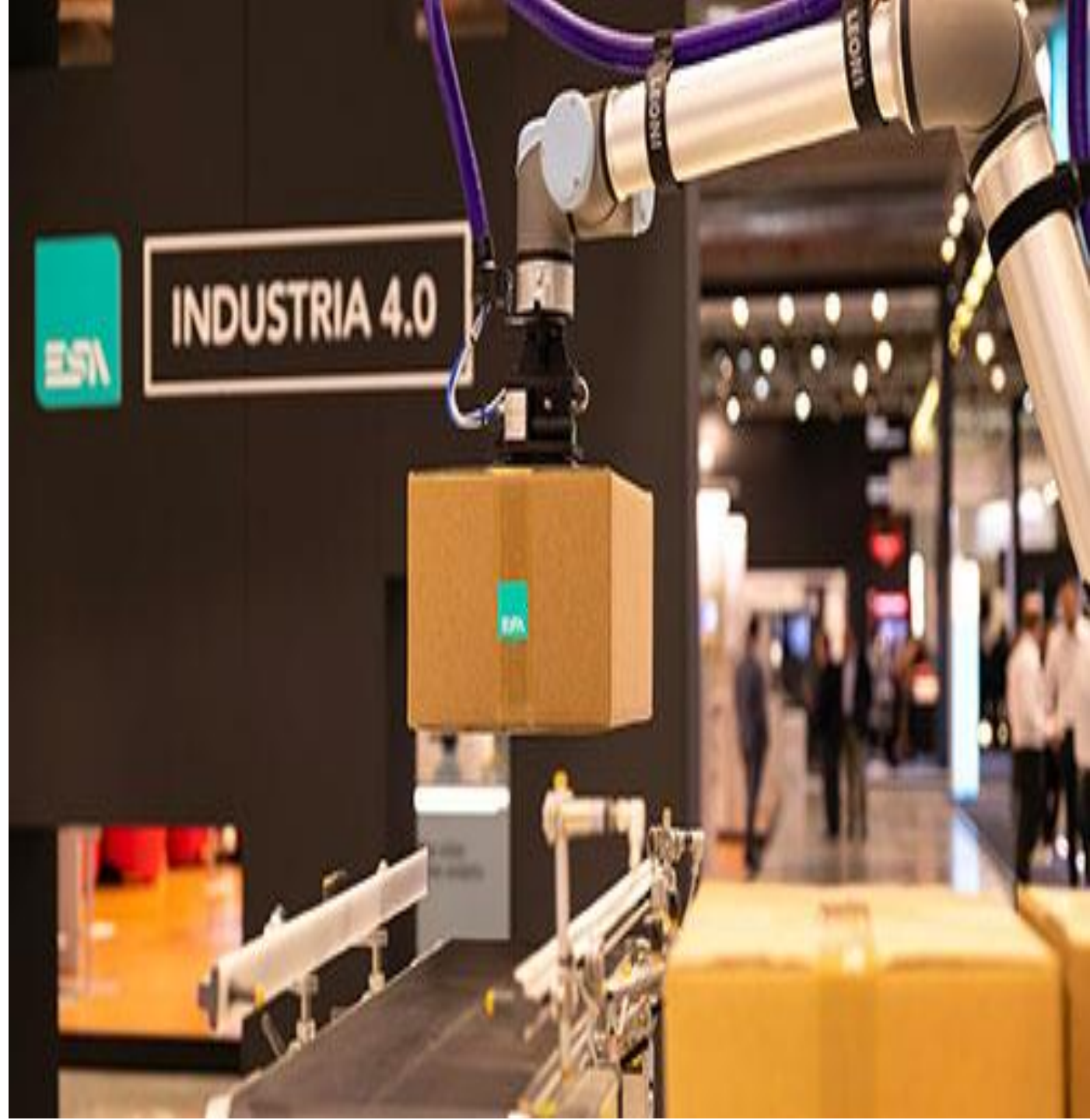


Benefits



Energy
efficiency

- Use of energy sensors & IoT reducing power consumption
- Changes in algorithms increasing energy efficiency of robots



Benefits



Sustainability

- Reducing waste in production processes
- Savings in using 3D printing



Industry 4.0 and inequalities

- Jobs, wages and profits
 - Profitability of firms & wages of skilled works
- Technological revolutions
 - Technological gaps



Specific challenges

Loss of jobs

Reshoring

Protecting workers

Gender perspective





Tackling the pre-conditions for Industry 4.0

Diversification

Digital
infrastructure

Digital skills

National strategy

Multistakeholder
mechanism

International
partnerships



Fostering adoption of Industry 4.0

Raise awareness

Investment promotion plan

Financing

Protecting workers and easing workforce transitions

International collaboration

The background of the slide features a large, light-colored classical building with many windows and columns, likely a government or institutional building. In the foreground, there is a large, dark, textured globe sculpture made of metal or stone, mounted on a circular base. The sky is blue with some light clouds.

Share Knowledge & information

Design policies, strategies & implement initiatives

Build capacity

Promote technology transfer

Legal frameworks, guidelines, norms & standards

Conclusions

- Diversification and increasing manufacturing competency
- Investment in digital infrastructure and workforce skills for industry 4.0
- Ethical frameworks and guidelines
- International cooperation on exchange of knowledge and experiences



Industry 4.0 for Inclusive Development