

The Perilous Path to EU Technological Sovereignty



A Premise: The Energy Cost of Tech Wars

China's ban on Nvidia Chips:

- Chinese government banned domestic tech companies from buying Nvidia AI chips
- Local alternatives: much more energy-intensive
- Subsidies to support Chinese tech companies
- Effects: increase in consumption of electric energy (high CO2 footprint)



Tech War: a Mix of Domestic Measures

In general:

- Subsidies
- Export controls and restrictions to outbound investments
- FDIs screening mechanisms

The EU also adopted instruments to:

- Curtail the power of Big Tech
- Enhance the cybersecurity



Focus on EU International Initiatives

An International Digital Strategy for the European Union (2025)

Three main goals:

- To boost EU' tech competitiveness
- To promote an high level of security
- To shape digital governance and standards

How? The EU Digital Diplomacy



Advancements at the Multilateral Level

United Nations:

- Global Digital Compact (2024)
- UN Convention against Cybercrime (2025)

WTO:

Joint Statement Initiative on Electronic Commerce (2024)

International Organisations for Standardisation



Advancements at the Bilateral Level

Bilateral Institutional Fora to discuss cyber issues

Free Trade and Investment Agreements

Partnerships on Sustainable Raw Materials



Focus on Digital Trade Agreements

Provisions on Free Flows of Data

- NO to domestic measures on data localisations
- Criticisms: potential problems for EU industrialisations efforts and for privacy

Provisions on Source Code

- NO to domestic measures on disclosure of source code
- Criticisms: such provisions are outdated and may hinder accountability mechanisms established by some EU normative instruments (DSA, DMA, AI Act)

Focus on Partnership on Raw Materials

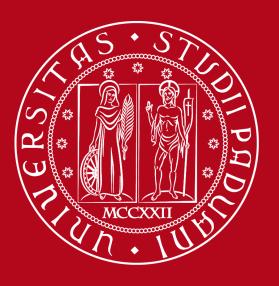
The EU and its non-binding partnership on **sustainable raw materials**:

- Flexibility
- Significant amounts of financial resources
- Promotion of sustainability goals

But sustainability cannot be taken for granted...



To Conclude....



UNIVERSITÀ DEGLI STUDI DI PADOVA