

“Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity.”
Robert Schuman

KDT JU

A VERY SHORT INTRODUCTION

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Training B2HE European Partnerships
11 May 2022



KDT JU

KEY DIGITAL
TECHNOLOGIES
JOINT UNDERTAKING



KDT JU BUILDING ON:

First generation JUs: ENIAC & ARTEMIS JU 2008-2014

- **full bottom-up**
- 2011-2013: **pilot lines, building critical mass**
- payments of EU funding part **linked to national cost recognition**
- start as first of its kind **tripartite** in the universe of European institutions



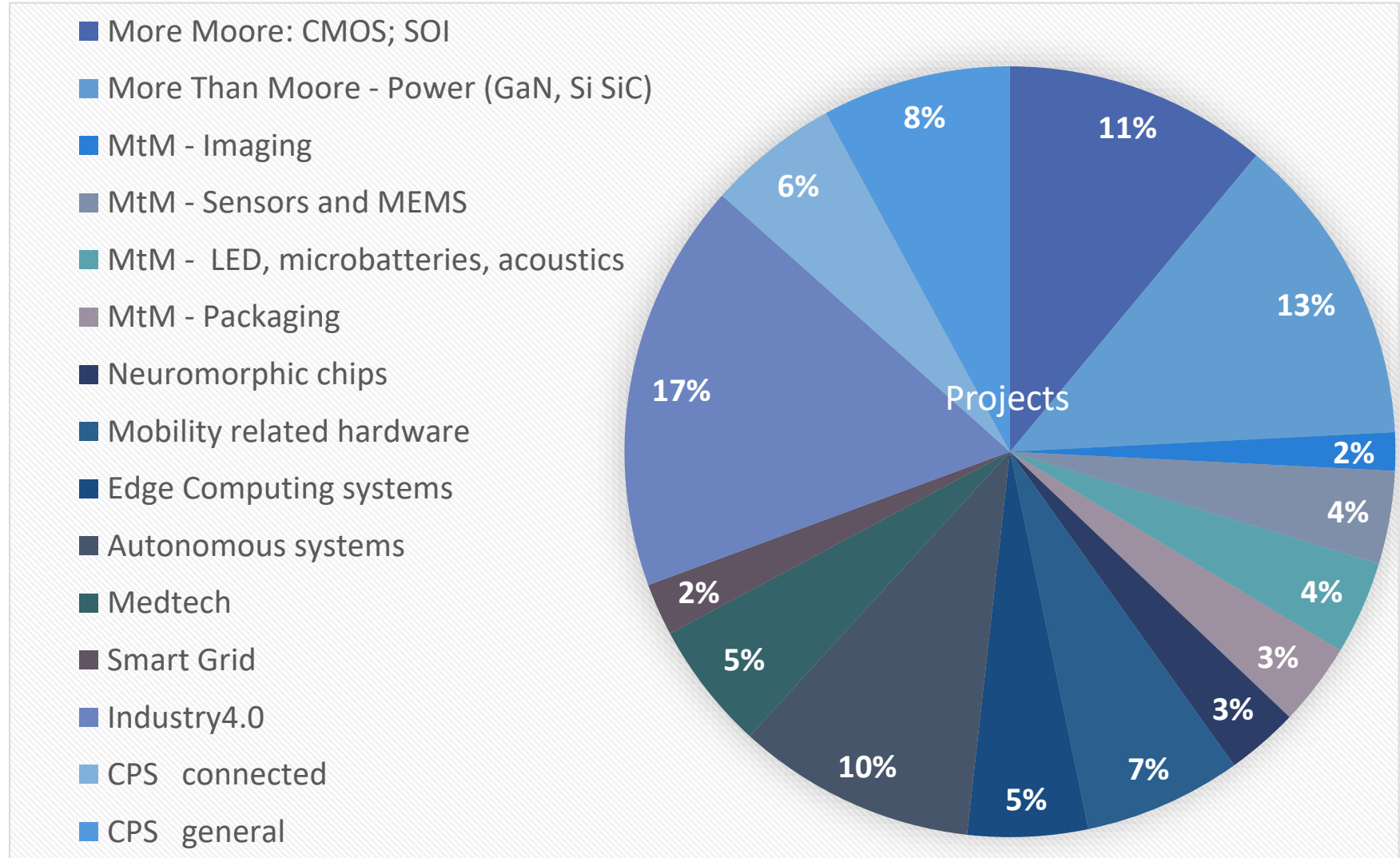
Second generation JU ECSEL JU 2014-2021

- along the **value chain**
- focussed on **industrial leadership** that promote synergies between commercial strategies and societal needs
- full bottom-up **with some special topics** that re-inforce/align national strategies and European priorities
- programme based on the **common agenda of Europe's ECS**
- **lighthouse initiatives**: Mobile.E, Industry4.E, Health.E
- payments of **EU funding based on H2020 rules**, national funding on national cost recognition (with few NA adopting the H2020 rules)
- start as merger of the first two joint undertakings: growing bigger



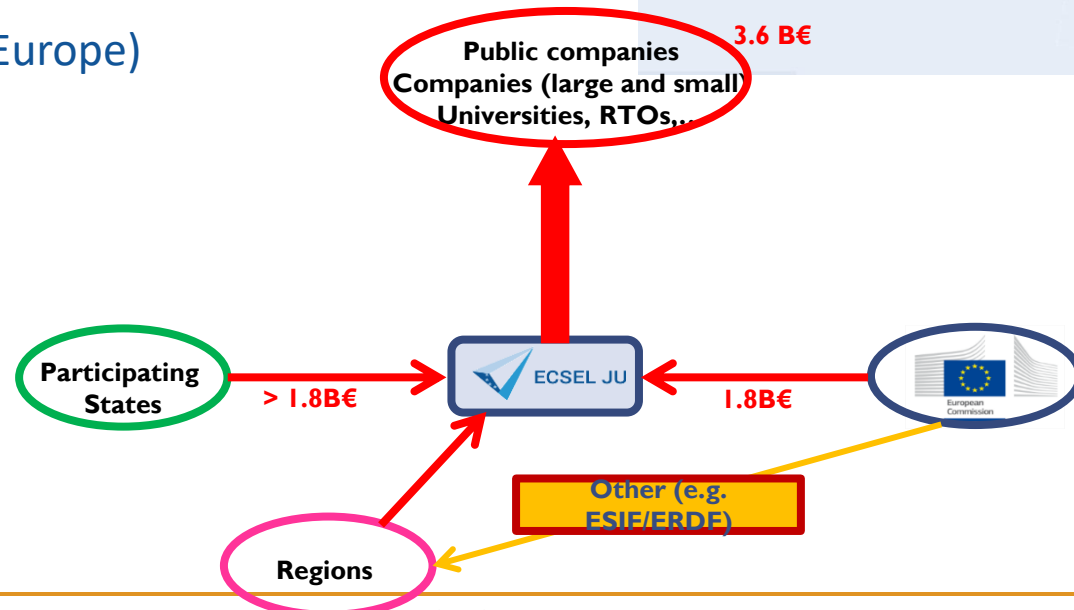
ECSEL JU 2014-2021

- 96 projects including 4 CSAs
- 3 220 beneficiaries
- 4 690 million Euro cost
- 2 280 million Euros in funding (EU+national)
- 408 500 Persons-month
- project participants from 29 participating states



KDT JU 2021-2027

- Third generation
- KDT JU = Key Digital Technology Joint Undertaking
- Started : 30 November 2021 (ECSEL JU -> KDT JU)
- Tripartite: Commission - Participating states – Industry associations
- Supported by 3 Associations: AENEAS, INSIDE, EPoSS
- Budget ambition : 7.2B€ funded by 1,8 B€ (EU)+1,8 B€ (national)
- Based on new framework programme (Horizon Europe)



<https://www.kdt-ju.europa.eu/>

KDT GOVERNANCE

Union Body with Legal Personality

Governing Board

KDT Members
(EC, Participating States, Private Members)

- **Strategic orientation, supervision**

Approves the ECS-SRIA, Work Programme (WP), strategic orientation and all operations of the KDT JU, and supervises the implementation of its activities

Executive Director

Programme Office

- **Chief Executive, legal representation**

Elaborates budget proposal, executes calls; monitors projects

Public Authorities Board

European Commission,
KDT Participating States

- **Representatives of the Public Authorities**

Approves rules of procedure and launch of calls for proposals, establishes funding budget, selection and allocation of funding to successful proposals

Private Members Board

AENEAS, INSIDE, EPoSS

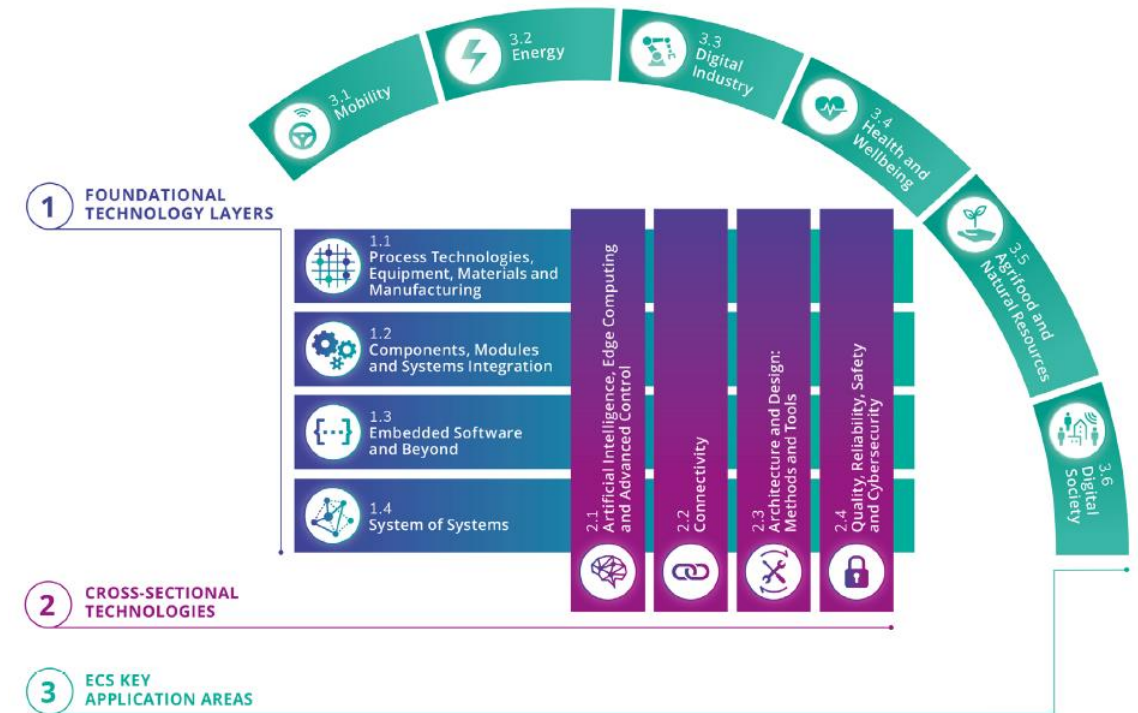
- **Defines research agenda**

Elaborates the Strategic Research and Innovation Agenda (ECS-SRIA) and organise supporting activities and events including an annual Stakeholder Forum.

ECS SRIA



- Boost **industrial competitiveness** through **interdisciplinary** technology innovations.
- Ensure/reinforce **EU strategic autonomy** through secure, safe and reliable ECS supporting key European application domains.
- Establish and strengthen sustainable and resilient ECS value chains supporting the **Green Deal**.
- Unleash the full potential of intelligent and autonomous ECS-based systems for the **European digital era**.



COOPERATION ASPECTS

Potential for synergies through cooperative actions are multiple :

- Smart Networks & Services: initiative on 5G and 6G connectivity
- European High Performance Computing: initiative on underlying supercomputing capacities
- Photonics, AI, data, robotics, Global competitive space system and Made in Europe: synergies are needed where EU industry has to develop leadership and competitiveness in the global digital economy.
- Digital Europe Programmes with testing facilities, skills development and capacity building activities in specific digital domains, similar for Connecting Europe Programmes
- Health, Mobility and Energy partnerships
- IPCEI, other national programmes
- Eureka clusters
- Coordination with regional clusters such as Silicon Europe, Silicon Saxony (Dresden), Minalogic (Grenoble), and DSP Valley (Leuven-Eindhoven)

European Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

■ Institutionalised Partnerships (Art 185/7)
■ Institutionalised Partnerships / EIT KICs
■ Co-Programmed
■ Co-Funded

* Calls with opening dates in 2023-24
 ** Calls with opening dates not before 2022

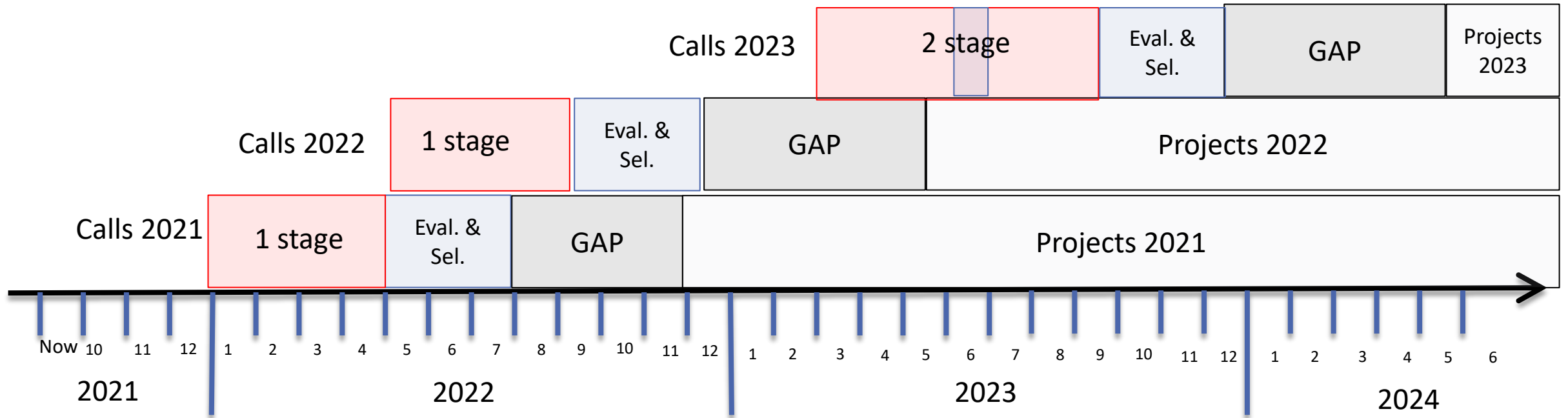
8 GOOD REASONS TO PARTICIPATE IN KDT PROJECTS

1. **Critical mass**
2. **Value chain projects:** including value chain partners is the motorway to accelerate co-innovation and market adoption
3. Building **trust**
4. Creating project pipelines for **long-term continuity**
5. Pushing new products/technologies in **new markets**, starting new companies
6. Exploitation of **synergies** across application and technology domains
7. Support working across competition, benchmarking technologies and **sharing innovation risk**
8. Allow the **education** of engineers/scientists in new technologies.

FOR HE ADD:

1. Participate to projects that **make a difference** to the planet and humanity
2. Leverage your participation through **cooperation across programmes**

KDT CALL PLANNING



STRUCTURE AND TOPICS

Action		Estimated EU Expenditure (M€)
Call 2021-1 IA	General according to SRIA 2021	108.0 M€
Call 2021-1-IA-Focus Topic	Development of open-source RISC-V building blocks	20.0 M€
Call 2021-2 RIA	General according to SRIA 2021	50.0 M€
Call 2021-2-RIA-Focus Topic 1	Processing solutions for AI at the edge addressing the design stack and middleware	20.0 M€
Call 2021-3-CSA	A Pan-European chip infrastructure for design innovation	10.0 M€
	Total	208.0 M€

Action	Topic	Estimated EU Expenditure (M€)
Call 2022-1 IA T1	Topic 1 General according to SRIA 2022 (IA)	120.0
Call 2022-1 IA T2 Focus Topic	Topic 2: Focus topic on Industrial supply chain for silicon photonics (IA)	20.0
Call 2022-1 IA T3 Focus Topic	Topic 3: Focus topic on Design of Customisable and Domain Specific Open-source RISC-V Processors (IA)	20.0
Call 2022-2 RIA T1	Topic 1: General according to SRIA 2022 (RIA)	74.5
Call 2022-2 RIA T2 Focus Topic	Topic 2: Focus topic on Ecodesigned smart electronic systems supporting the Green Deal objectives (RIA)	20.0
	Total	254.5 M€

HOW TO PARTICIPATE?



ECS Collaboration Tool

A networking tool for project ideas and potential partners.

Inside and AENEAS have now merged their collaboration support tools into a single co-managed service: the ECS Collaboration Tool. AENEAS and Inside Industry Association wanted to create one tool to facilitate easy information exchange within the ECS community and allow the collection and management of all relevant data, ideas and project proposals in one place.

<https://aeneas-office.org/collaboration/ecs-tool/>



Create a project idea

Initiate a project idea in the ECS Collaboration Tool, invite partners and browse other project ideas.



Look for a partner

Use the partner search on ECS Collaboration Tool to look for possible partners based on their expertise and invite them to join your project idea.



ECS Brokerage Event 2022

The 2022 edition of the ECS Brokerage Event will be held online on 18-19 January 2022. [More here.](#)



A NEW DEVELOPMENT: EUROPEAN CHIPS ACT



English

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Available languages: English ▾

Press release | 8 February 2022 | Brussels

Digital sovereignty: Commission proposes Chips Act to confront semiconductor shortages and strengthen Europe's technological leadership

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Today, the Commission proposes a comprehensive set of measures to ensure the EU's security of supply, resilience and technological leadership in semiconductor technologies and applications. The [European Chips Act](#) will bolster Europe's competitiveness, resilience and help achieve both the digital and green transition.

https://ec.europa.eu/commission/presscorner/detail/en/ip_22_729



The context: we are in a crisis...

1

Severe shortage of semiconductor chips

In a context of...

- Accelerated digital transition
- Increased demand for semiconductors
- Concentration of production in Asia (Taiwan, Korea)

2

Security supply risk in the EU

Due to...

- Limited capabilities in manufacturing
- Insufficient expertise in manuf. at < 20 nm
- High entry fees / cost for new facilities
- Geopolitical tensions (e.g. South China Sea)

3

Detrimental effect across industries

Leading-edge semiconductor technology is central to...

- Competitiveness
- Security, safety and data protection
- Energetic performance of digital systems



*No single Member State can face these problems alone, need for:

- EU & international partnerships
- Public subsidies



Minus 11 million cars produced globally and 23% drop in German car sales in 2021.