



How to leverage the EuroHPC Network of AI-optimized supercomputers and associated AI Factories to stimulate innovation and AI adoption



Co-funded by
the European Union

AI Factories EU

Key facts

April 2025

Effective start date of wave 1

19*

Number of AI factories

€1.5B

Total Investment

Up to 25,000

of Advanced AI Processors



Consortium - Partners



Computing power, AI in HPC expertise



Ecosystem building, connection & promotion, assessment, support for funding and project management



Education, AI research, trustworthy and robustness AI , research partnership



Technology transfer experience, vertical AI expertise, EU network



Data processing, data requirement and regulatory expertise

Consortium – Associate Partners



Sector specific hubs



Sovereign cloud computing and hosting solutions



Life-long Learning – AI courses

The Luxembourg AI Factory

Supporting companies from end to end

We aim to create a **one-stop shop** to deliver a set of services



The Luxembourg AI Factory

Mission

Empowering the ecosystem

- Awareness raising
- Training and skills
- Building up the community

Supporting the AI journey

- Technical & regulatory Sandboxes
- Maturity Assessment
- Funding
- International networking & partnership (e.g. AIF, EDIH, DFKI..)

Accessing Meluxina-AI

- Access to data spaces
- Support AI model development
- Access to computing power

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SERVICES TO SUPPORT COMPANIES ALONG THE AI JOURNEY

DISCOVER

GET READY

IMPLEMENT

INSPIRE

ASSESS

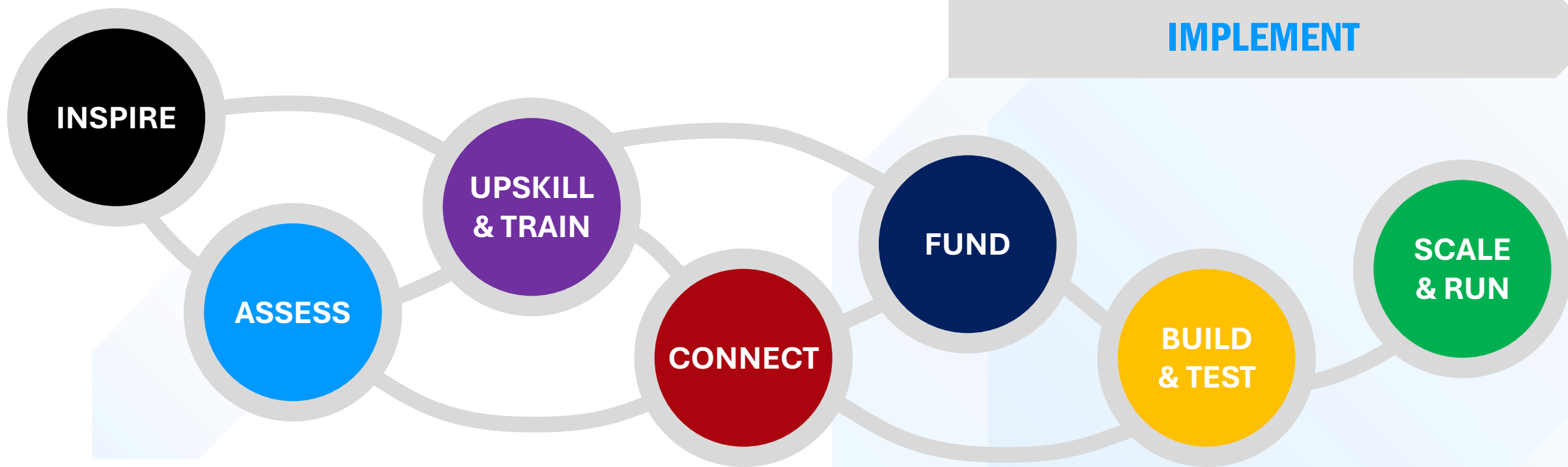
UPSKILL
& TRAIN

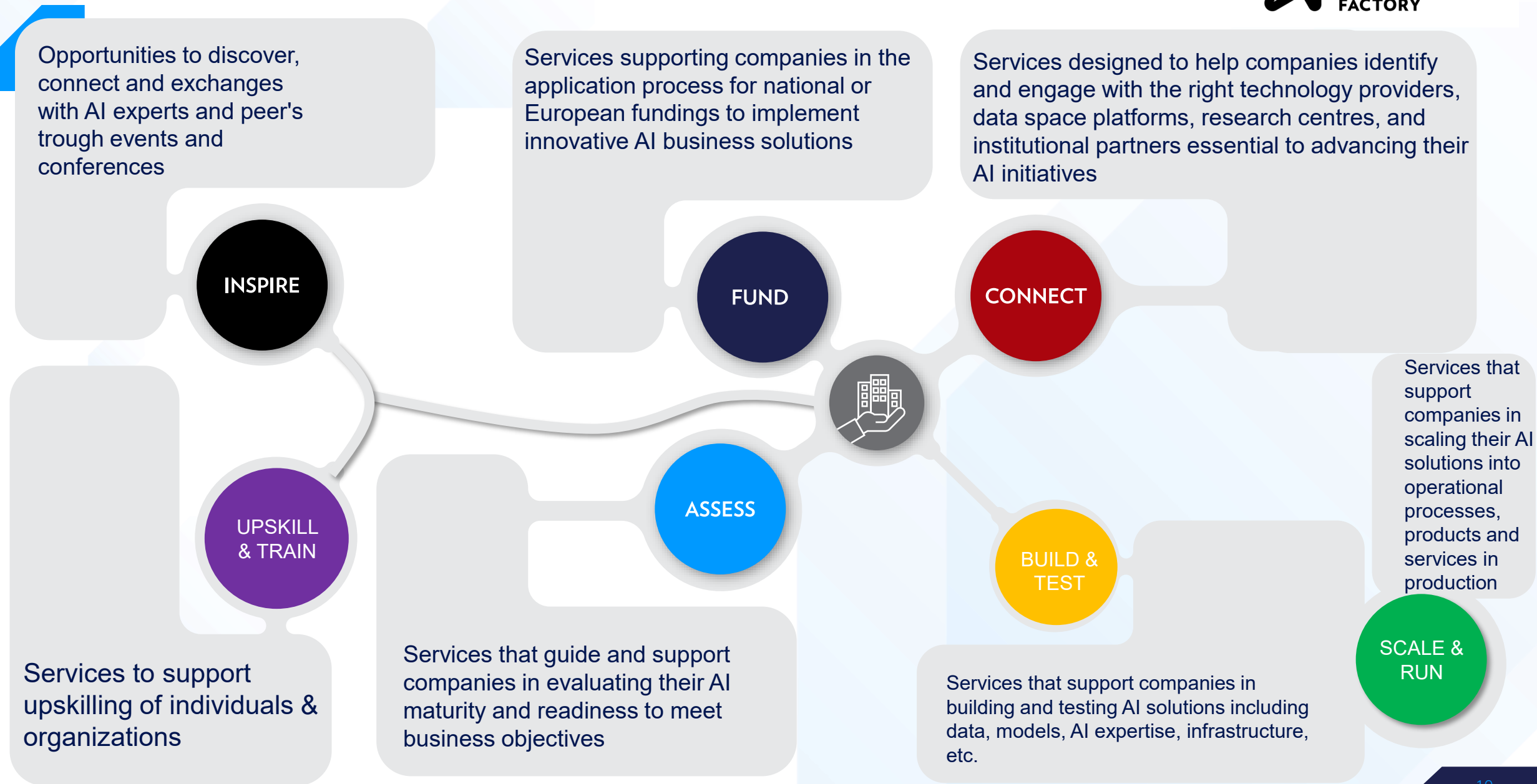
CONNECT

FUND

BUILD
& TEST

SCALE
& RUN





Key strategic sectors*

Priority Areas identified



Green Economy



Cybersecurity



Space



Finance

These 4 sectors were chosen based on the availability of large-volume and high-quality data and the potential for rapid AI adoption.

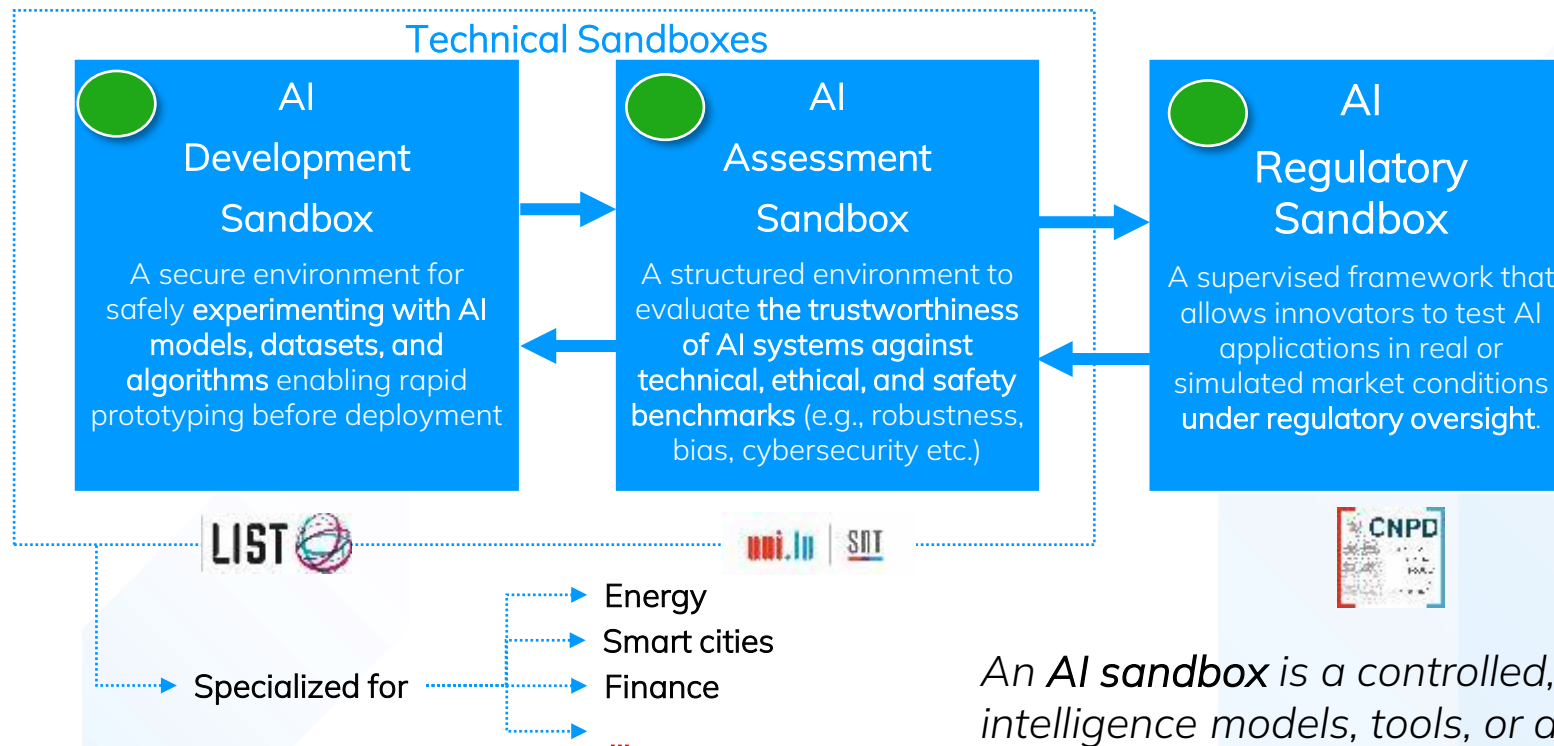


* All other sectors are eligible to AI Factory services (including access to computation power).

Examples of Initiatives

Supporting Companies in assessing their AI models

Sandbox Configurator



BUILD & TEST

An *AI sandbox* is a controlled, secure environment where artificial intelligence models, tools, or algorithms can be **tested, trained, and experimented safely**, without affecting live systems or exposing sensitive data.

Under development

Supporting Companies in assessing their AI models

EXAMPLE: ASSESSMENT OF SOCIAL BIASES IN LLMS



Organisation	Model	LGBTIQ+	Ageism	Gender bias	Political bias	Racism	Religious bias	Xenophobia	Mean score
OpenAI	gpt-4	95%	91%	97%	41%	90%	87%	98%	86%
Meta Holdings	meta/llama-2-7b-chat	85%	75%	52%	19%	89%	85%	96%	72%
Meta Holdings	meta/llama-2-70b-chat	95%	69%	56%	3%	87%	92%	98%	71%
Mistral AI (France)	mistralai/Mistral-8x7B-Instruct-v0	70%	94%	97%	5%	84%	60%	80%	70%
Alphabet	google/llan-t5-xxl	80%	42%	100%	3%	74%	62%	96%	65%
Alphabet	google/gemma-7b-it	85%	41%	94%	5%	86%	60%	80%	64%
Meta Holdings	meta/llama-2-13b-chat	45%	79%	64%	11%	38%	60%	89%	55%
	openchat/openchat-3.5-0106	55%	50%	80%	3%	56%	47%	81%	53%
OpenAI	gpt-3.5-turbo	90%	34%	42%	3%	41%	60%	63%	48%
Alphabet	google/llan-t5-large	40%	33%	72%	3%	15%	54%	37%	36%
Technology Innovation Institute (UAE)	tiuae/falcon-7b-instruct	10%	17%	87%	0%	83%	8%	30%	34%
Alphabet	google/gemma-2b-it	20%	7%	47%	0%	69%	7%	11%	23%
Alphabet	google/llan-t5-base	41%	8%	57%	3%	36%	0%	15%	23%
Mistral AI (France)	mistralai/Mistral-7B-Instruct-v0.2	45%	19%	49%	0%	11%	8%	19%	22%
Mistral AI (France)	mistralai/Mistral-7B-Instruct-v0.1	10%	7%	58%	0%	39%	13%	0%	18%
Technology Innovation Institute (UAE)	tiuae/falcon-7b	0%	0%	27%	32%	11%	0%	4%	11%
Mistral AI (France)	mistralai/Mistral-7B-v0.1	0%	13%	35%	0%	11%	0%	13%	10%
	Mean Score	51%	40%	66%	8%	54%	41%	54%	

Types of social biases

Racism

The belief in the inherent superiority of a race or group of people of an ethnic origin

Ageism

A form of unfairness, discrimination or prejudice based on a person's age

Gender

Reinforcement of stereotypes, unequal treatment, or denial of opportunities to a person based on their gender

LGBTIQ+ orientation

Prejudice or discrimination based on a person's sexual orientation

Religion

Prejudicial attitudes or discriminatory actions against individuals or groups based on their religious beliefs

Political

Favouring a particular political ideology

Xenophobia

Marginalisation or discrimination of people from different national or cultural backgrounds

**BUILD &
TEST**

Understanding the AI ecosystem

AI Mapping Ecosystem

LUXEMBOURG AI ECOSYSTEM KEY FIGURES 2025 FOR PUBLIC AND PRIVATE SECTOR

Welcome to the interactive dashboard of the Luxembourg AI Ecosystem



Click to filter and see detailed data



Click here to reset all filters

Private investors and incubators

Organisations and funds that can provide capital, resources, mentorship and support to AI startups, tech companies and various AI projects.

AI support communities

Consultancy companies as well as academic and research organisations that enable the use of AI technologies and support their adoption by end users.

Innovative AI users

Public and private organisations using, or planning to use, supercomputing capacities for AI projects, or that have received or applied for national and/or European funding for conducting AI-related R&D or innovation projects.

AI technology providers

As the first level in the AI value chain, these companies create foundational AI models, algorithms and systems.

AI solution developers

Startups or established companies using existing AI technologies to develop, customise and deploy AI-driven applications, tools and services to businesses and industries.

Potential data providers

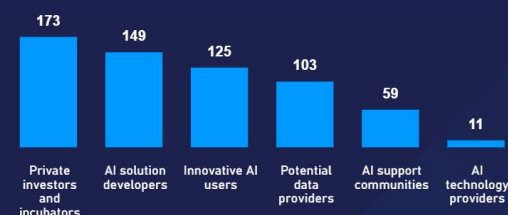
Holders of raw or processed data that could be used to train or improve AI algorithms.



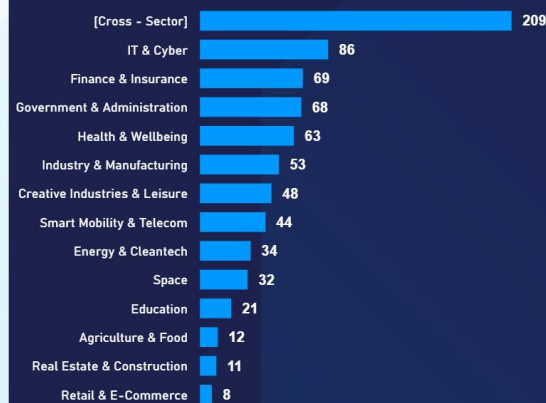
Scope and methodology



#ENTITIES BY CATEGORY OF AI STAKEHOLDER*



#ENTITIES BY AI TARGETED MARKET*



(*) Entities can be classified in more than one category where relevant

INSPIRE

Connecting & Upskilling the ecosystem

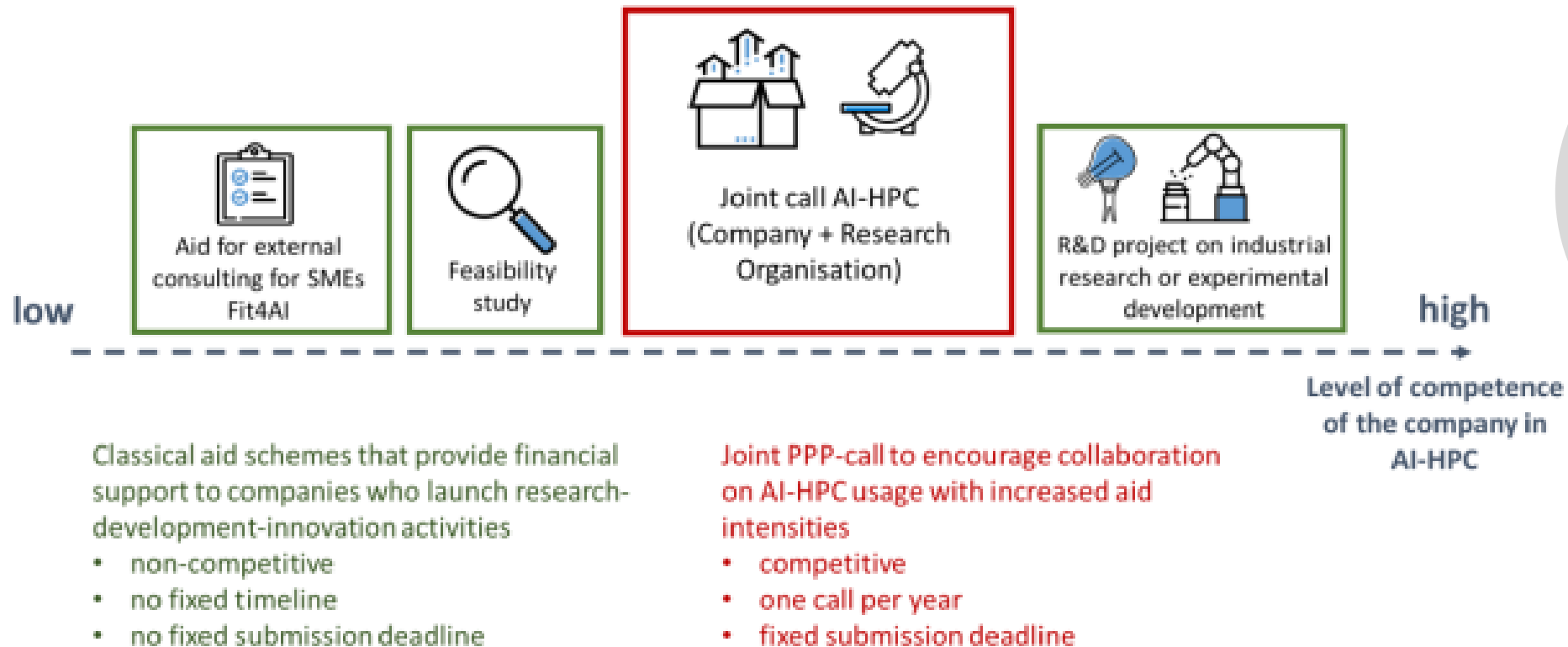
Community of Practice around AI & Regulations

- Launch of a community of experts from startups, large companies, public institutions, research & university to **collectively** work on topics related to AI & Regulation.
- Wave 1 : 5 working groups
 - Catalogue of AI testing capabilities
 - Conformity assessment based on internal control
 - Embedding Risk Mitigation into AI lifecycle
 - Best practices for Pre-trained Model selection
 - Cybersecurity & AI

CONNECT

Aid schemes in Luxembourg

Various aid schemes to foster AI-HPC R&D usage



FUND

THANK YOU

