

EUROPEAN CLUSTER CONFERENCE 2024

7-8 MAY 2024, BRUSSELS

#EUClusterConference

Strengthening the EU's defence, health, energy and economic security

Kaspar Richter, Head of Unit, Sustainable Growth & Business Environment, Directorate-General for Structural Reform Support, European Commission

Fernando Rianza Fernandez, Economist and Policy Analyst, Centre for Entrepreneurship, SMEs, Regions and Cities, OECD

Frederik Loecx, CEO, Flux50

Adeline Gleizal, EU & Innovation Project Manager, SAFE CLUSTER

Adrian van den Hoven, Director General, Medicines for Europe

Anais Le Corvec, Network Manager, Council of European BioRegions (Moderator)

**How should the
EU help clusters
build resilience?**

Regenerative agriculture
Social sustainability
Equity Systemic thinking Good cases
Training
Societal justice Inclusiveness
Regenerative finance

OECD - DG Reform TSI project

Enhancing EU Mining Regional Ecosystems to
Support the Green Transition and Secure Mineral
Raw Materials Supply

Fernando Rianza - Policy Analyst at Centre for
Entrepreneurship, SMEs, Regions and Cities, **OECD**



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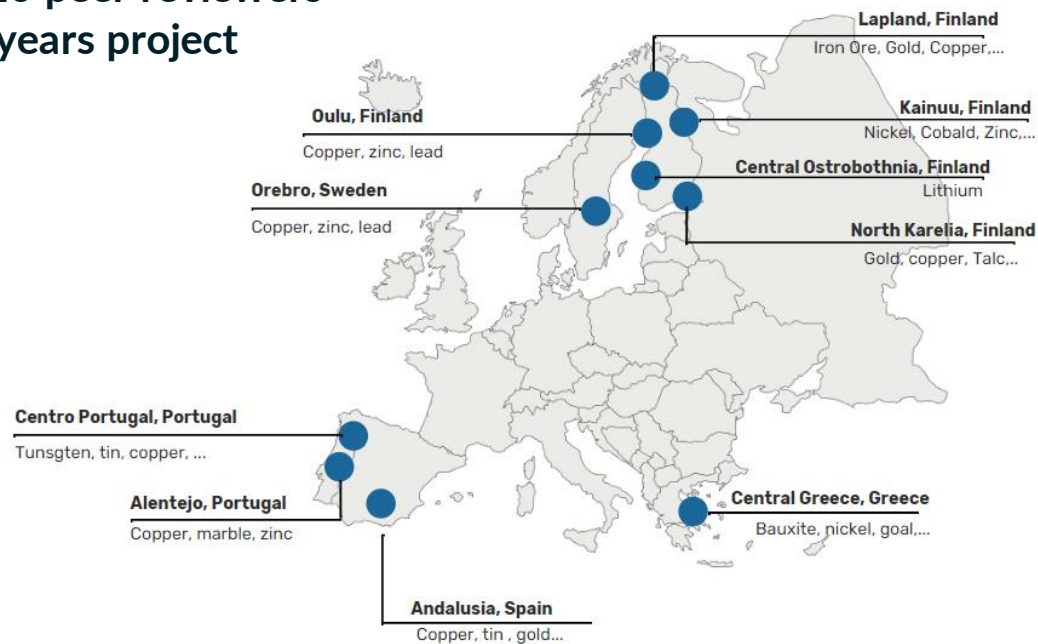
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The project DG Reform – OECD

The role of European mining regional ecosystems in the energy security, green transition and the CRMA

- ✓ 10 Regions of 5 Countries – 10 field missions
- ✓ Over 20 Municipalities interviewed
- ✓ 12 Mines visited
- ✓ +10 peer reviewers
- ✓ 2 years project



Aim

- Understand the regional assets and challenges for raw materials supply.
- Increase local well-being around social, economical and environmental dimensions.
- Identify and highlight **good practices**.

Outcomes

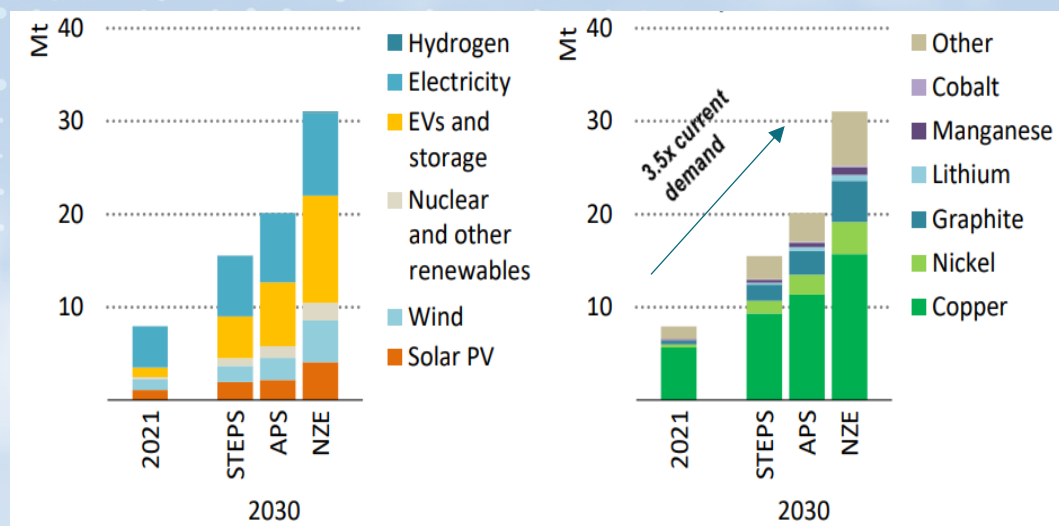
- **Regional profiles** with thematic focus, good practices and policy recommendations.
- **Synthesis report** with general framework for action.
- **Capacity building** / peer learning opportunities.

Fact-finding missions to the regions – promoting exchanges

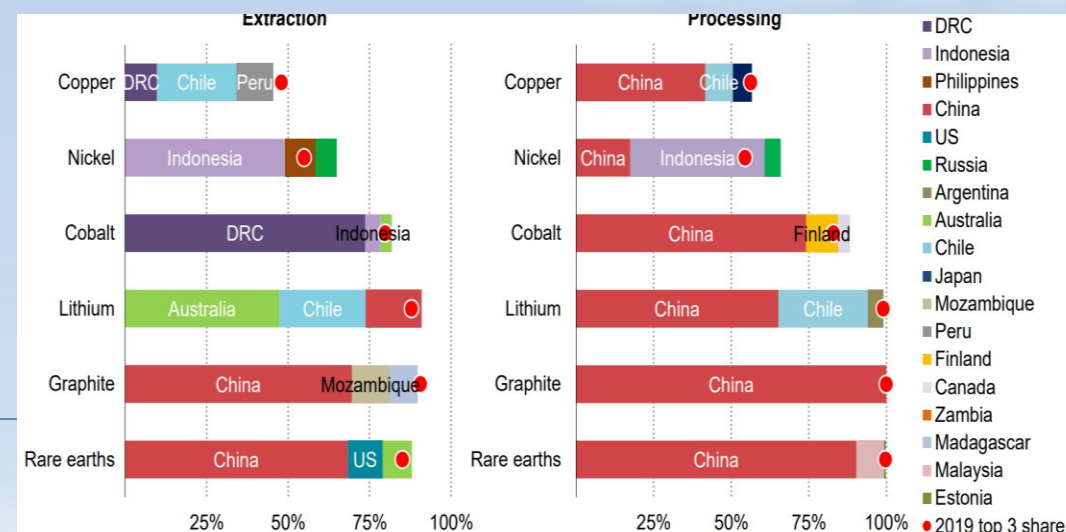


Behind the increasing demand for critical minerals

Mineral requirements for clean energy technologies by scenario, 2021 and 2030



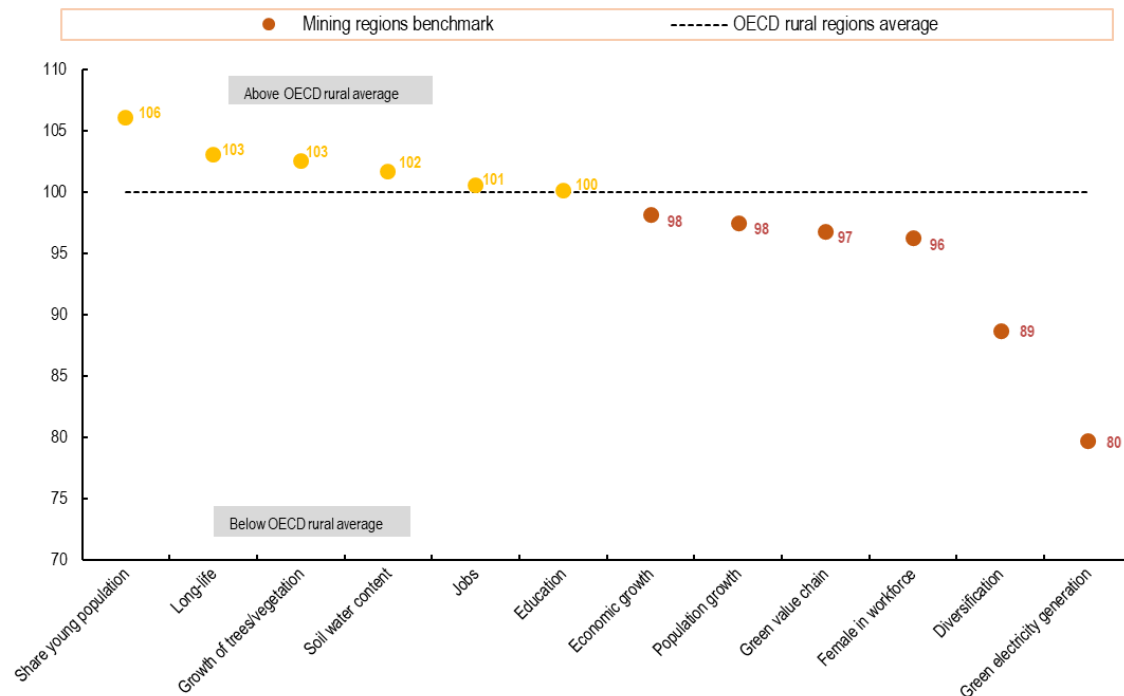
Share of the top three producing countries of selected minerals, 2022



Critical Raw Materials Act.
x3 times more supply of minerals EU sourced and 15% coming from recycling.

In all dimensions: Social, Economic and Environmental

OECD mining regions relative to rural regions



5x larger (km²) and 37% less densely populated than OECD rural regions.



- High Salaries, jobs, local revenues
- Community and technology infrastructure
- Support green technologies, phasing out fossil fuels.



- Lock-in effects, income inequalities, volatility
- Gender imbalance, FIFO externalities, labor shortage in other activities.
- Land use and biodiversity change, water pressure

The relevance of Clusters in regional mining ecosystems

Modern mining governance

- Social acceptance
- Principle for responsible mining
- Post mine transition
- Promote peer learning and international best practices.

Circularity and Sustainability

- Involve local companies and knowledge centers in circularity
- Facilitate an enabling regulator/admin environment
- Community led environmental monitoring

Skills

- Develop programs for future skills demand
- Supply in the right locations from operators to management
- A gender focus

Innovation & Research to Business

- Link the businesses in innovation projects
- Coordinate EU funds for innovation
- Interregional collaborations

Future-proofed infrastructure

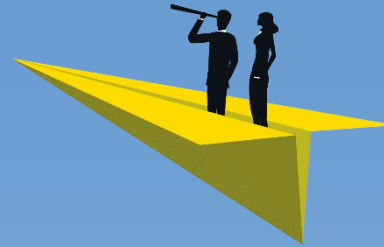
- Collective investment in future-proof infrastructure (e.g., green energy, roads)

Next steps **DG Reform – OECD TSI**



Funded by
the European Union

- **23-24 May:** Inter-regional meeting in Greece to present preliminary findings for the 10 regions
- **8-10 October:** Dissemination and engagement in 2024 OECD mining regions conference in Ontario, Canada (8-10 October)
- **4Q2024:** Inter-regional meeting (TAIEX) in France
- **1Q2024:** EU representatives and region to discuss advance framework for action
- **Summer 2025: Launching results**



Thank you

Fernando Rianza
Fernando.riazafernandez@oecd.org

Flux50 - Energy Security

#EUClusterConference

INSPIRE – CONNECT - ACCELERATE

220 members

90 projects in
Flanders

4 Focal groups &
roadmaps

4300
followers

> 160M€ investments

5 living labs

>10 events /year

> 105 m€ subsidies

20 European projects

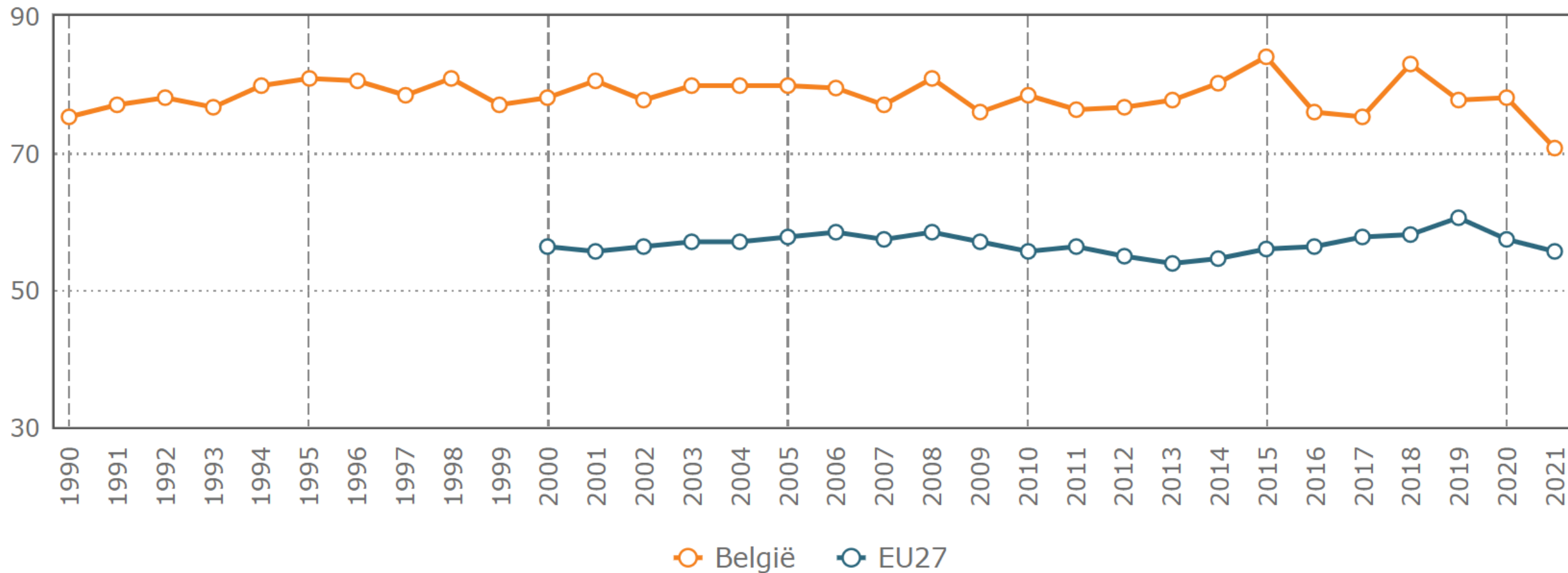
Energy Security

The IEA defines energy security as “Ensuring the uninterrupted availability of energy sources at an affordable price”

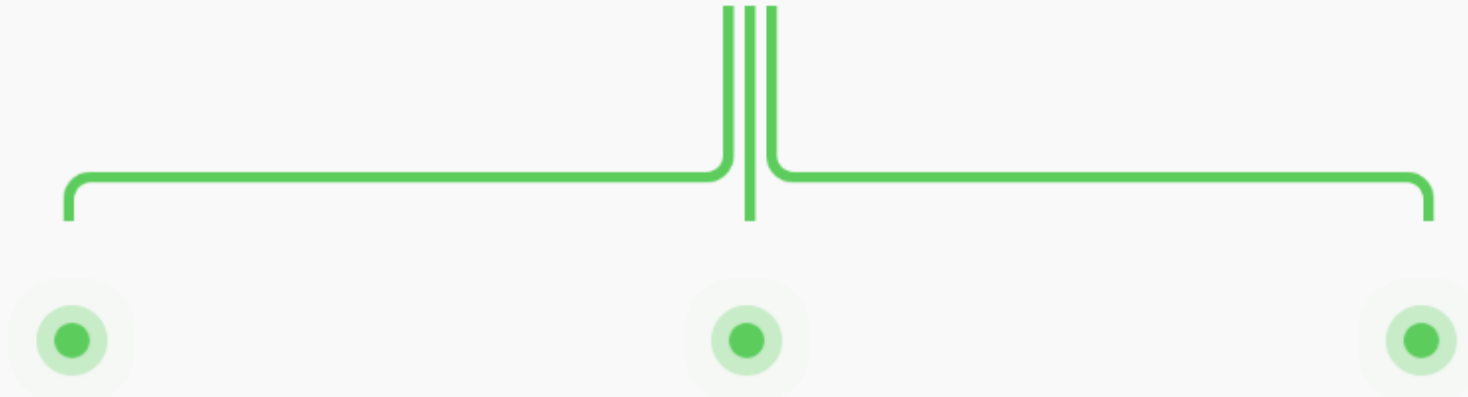
- long-term energy security mainly deals with timely investments to supply energy in line with economic developments and environmental needs.
- short-term energy security focuses on the ability of the energy system to react promptly to sudden changes in the supply-demand balance
- the diffuse and decentralized nature of much renewable generation does raise the risk of cyberattacks
- many clean energy technologies rely on metals and minerals that are in tight supply

Energieafhankelijkheid - België en internationale vergelijking

procent van energieverbruik



The 3 paths to carbon-neutrality



01 **Central
Scenario Concept**



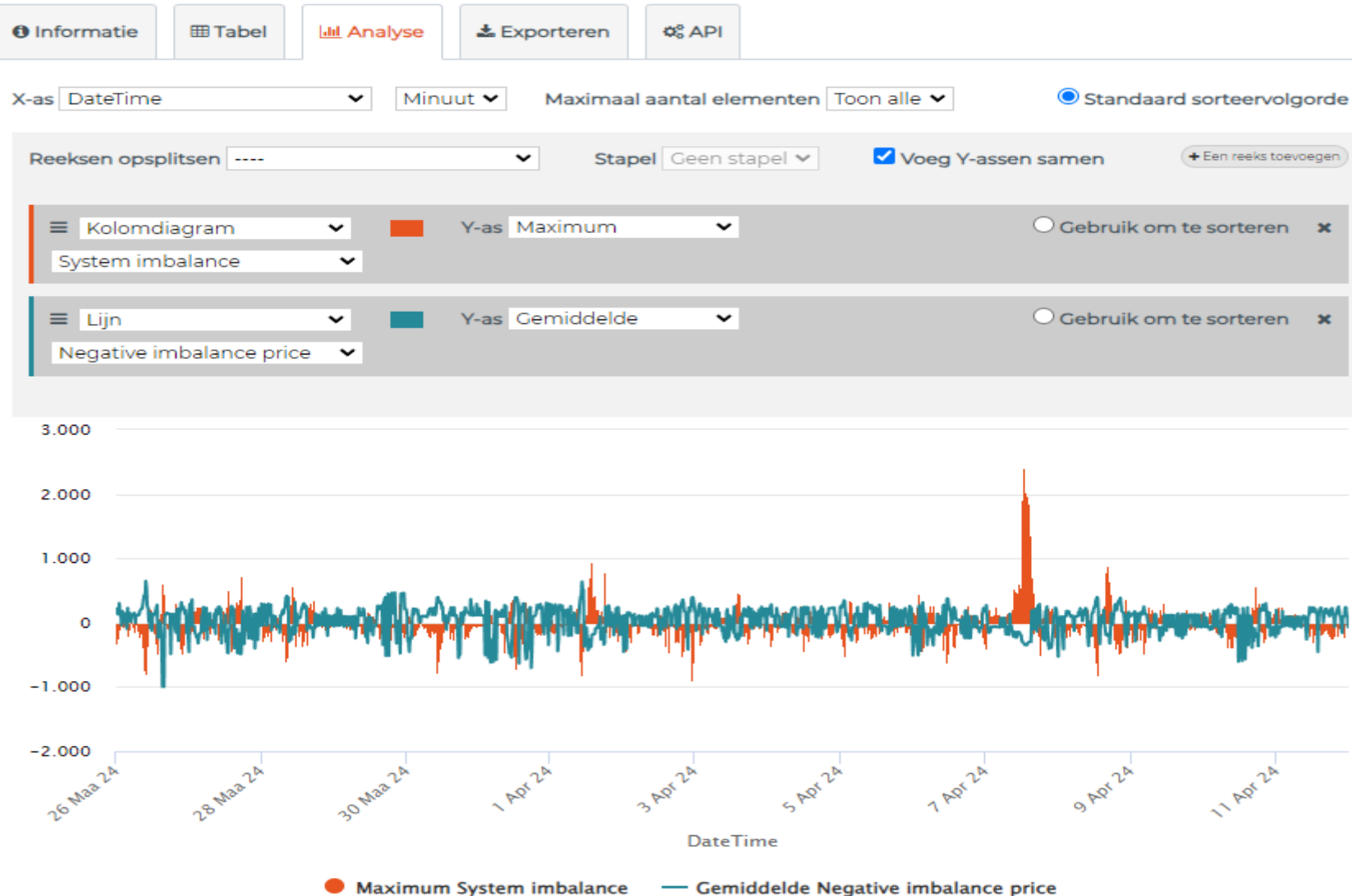
02 **Electrification
Scenario Concept**



03 **Clean Molecules
Scenario Concept**



Imbalance prices per quarter-hour (Historical data)



Participants in the European Sky Shield Initiative

- ESSI members in NATO
- ESSI members in the EU
- ESSI members in both NATO and the EU
- ESSI participation announced

* Countries currently in the NATO ratification process

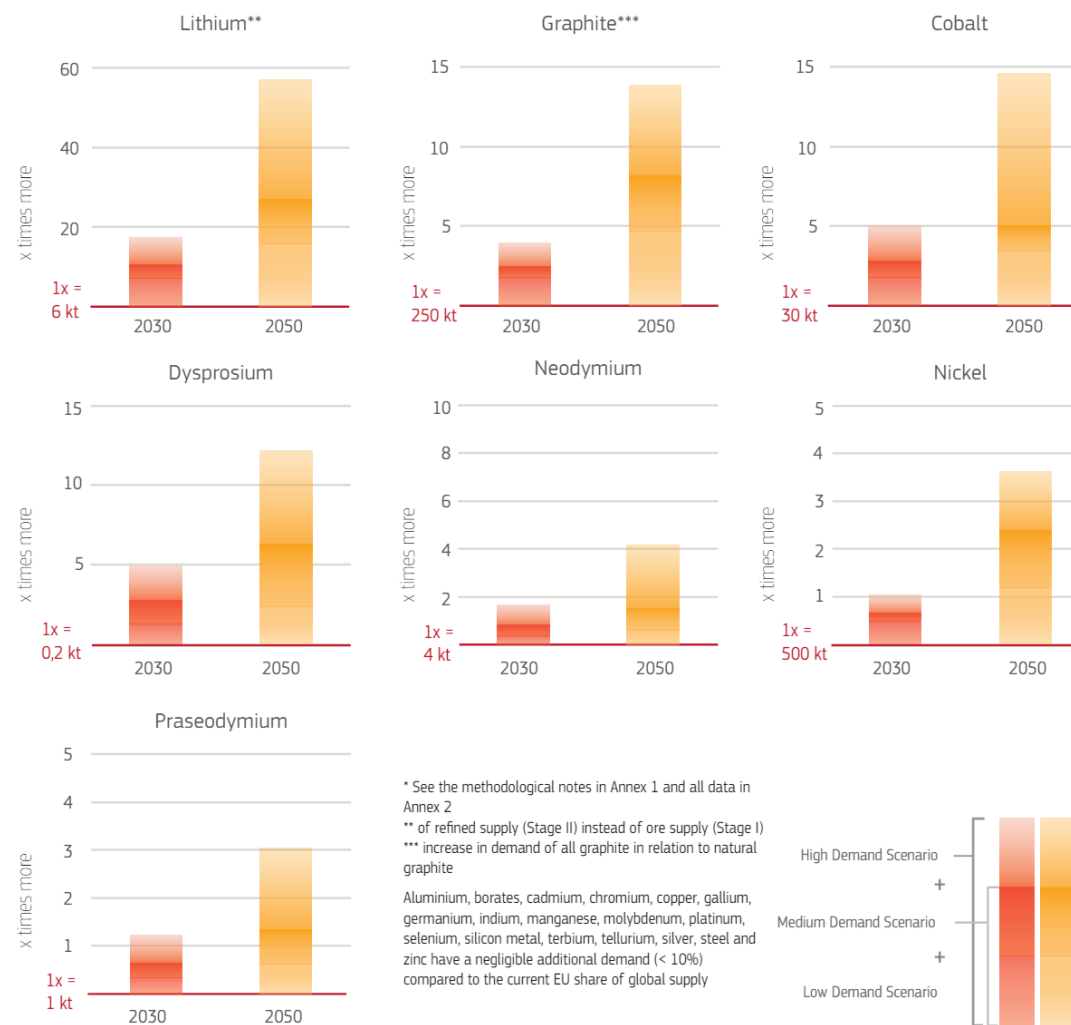
Sources: BMVg, The Local SE

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Figure 1. Combined critical raw materials use in different technologies in the EU in 2030 and 2050

Additional material consumption batteries, fuel cells, wind turbines and photovoltaics in **renewables and e-mobility only** in 2030/2050 compared to current EU consumption* of the material in **all applications**



Strengthening the EU's defence, health, energy and economic security

Adeline GLEIZAL, EU & Innovation Project Manager
at SAFE Cluster (France)



#EUClusterConference

SAFE – French Innovation Cluster

Aerospace industry

40%
Of the network



Space industry

30%
Of the network

Security area

40%
Of the network



Defence sector

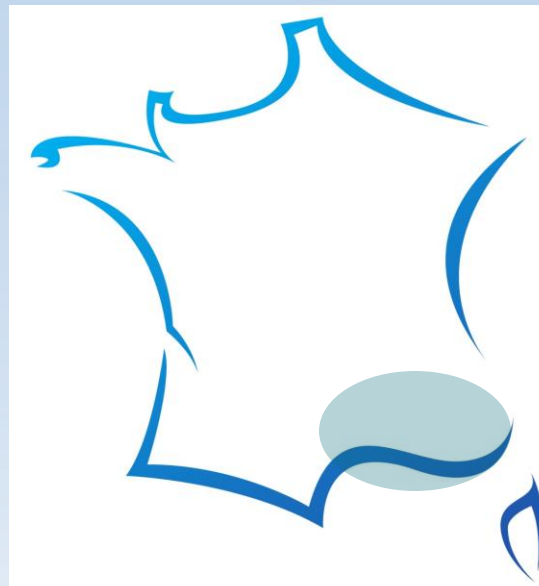
40%
Of the network



+500 members

70%
Companies

20%
Academics/RTOs



The Security industry at SAFE

Covers the whole value-chain from safety to security

The security industry covers a vast technological perimeter capable to respond to security issues in all their dimensions:

Cyber
security

Personal
rescue

Transport
security

Infrastruc-
-tures &
networks

Territorial
security

Protection
of popu-
-lations

Fight
against
terrorism &
malicious
acts

Crisis
mgmt

- Security of **major events**
- Technological and natural risk **disasters**
- Citizen and civil **protection**
- Open innovation and **sourcing of technology**
- **Experimentations of solutions** – test beds and near-real environment
- Industrial and **territory resilience**





SAFE aims at :

- Develop innovative security offers for territories and site operators their operational implementation
- Become a leader in disruptive technologies (AI, big data, Block Chain, etc.)
- Guarantee “security and ethics by design”
- Support industries and territories throughout crisis management process (anticipate, absorb, bounce back, evolve)
- Go beyond the French scale : ongoing European projects at the moment on security/safety



- 8 partners
- Coordinated by SAFE
- 5M€ budget
- Including 3,5M€ distributed to European SMEs
- To fund innovative solutions for safer and more secure cities & territories

SecurIT project in a nutshell



Main outcomes of the SecurIT project

- 3,5 M€ distributed as direct funding to SMEs
- 95 SMEs received funding from the European Commission
- 42 solutions funded and developed towards safer and more resilient cities and territories
- 40 international collaborations permitted by the project
- 28 demonstrations and experiments performed
- 14 prototypes developed

Final event planned in Paris on May 21st 2024



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Strong benefits for companies

- **Cascade funding** : very valuable instrument to push SME to get agile funding at EU level
- **Innovation booster** and a great trigger to further collaboration among suppliers & end-users on a high sensitive market
- **Stimulate concrete international collaboration** among SMEs, tech providers, security specialist & end-users
- **Highlight on the vital role of Clusters as catalysts to innovation projects**: good knowledge of their ecosystem, with ability to design, organise calls, answering the needs of the market
- Calls are tailored to the capacity and needs of SMEs





[Securit-project.eu](https://securit-project.eu)



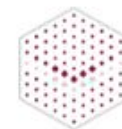
@SecurIT Innosup



@SecurITproject



@SecurIT20



LSEC
LEADERS IN SECURITY

POLESCS

L3CE

HSD

Systematic
Paris Region Deep Tech Ecosystem

CenSec
CENTER FOR DEFENCE, SPACE & SECURITY



FundingBox



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005292

PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY

FERNANDO RIAZA FERNANDEZ,
ECONOMIST & POLICY ANALYST,
CENTRE FOR ENTREPRENEURSHIP,
SMEs, REGIONS & CITIES, OECD



PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY



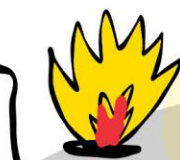
SECURITY & RESILIENCE

INDUSTRIAL ENERGY CAPACITY

TSI SUPPORT FOR ENERGY
EXPERT? ADVICE FOR MEMBER SUPPORT

NET ZERO

SUSTAINABILITY
ECONOMIC SECURITY



ENERGY CRISIS FOLLOWING INVASION OF UKRAINE



GREEN DEAL & NET ZERO TECHNOLOGIES

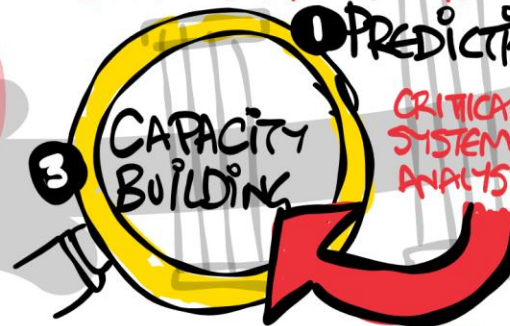
OUR TOOLS AND TECHNIQUES

EXAMPLE

WORKING WITH SPAIN

REPowerEU
DIVERSIFYING AWAY FROM IMPORTED GAS

SUPPLY CHAIN ANALYSIS



2

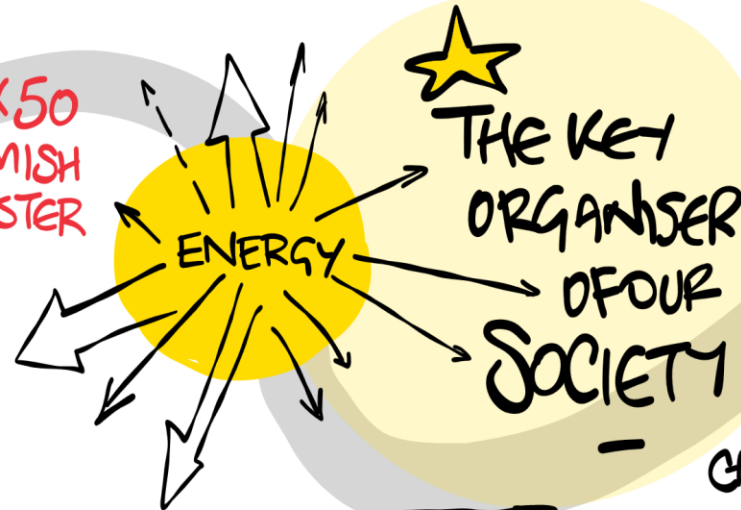
SIMULATION ANALYSIS

PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY

FREDERIK LOECKX,
CEO, FLUX50



FLUX50
FLEMISH
CLUSTER



★ THERE'S A HUGE
ROLE FOR COMMUNICATION

WITH LONG TERM
COMPLEX ISSUES

REFRIGERATION
AI
IT
EVs

NEW
DEMANDS

! FLEXIBLE
ENERGY SUPPLY

★ NET ZERO
ENERGY
TRANSITION

CAUTION!
JOKE →



! GETTING
AWAY FROM
CARBON

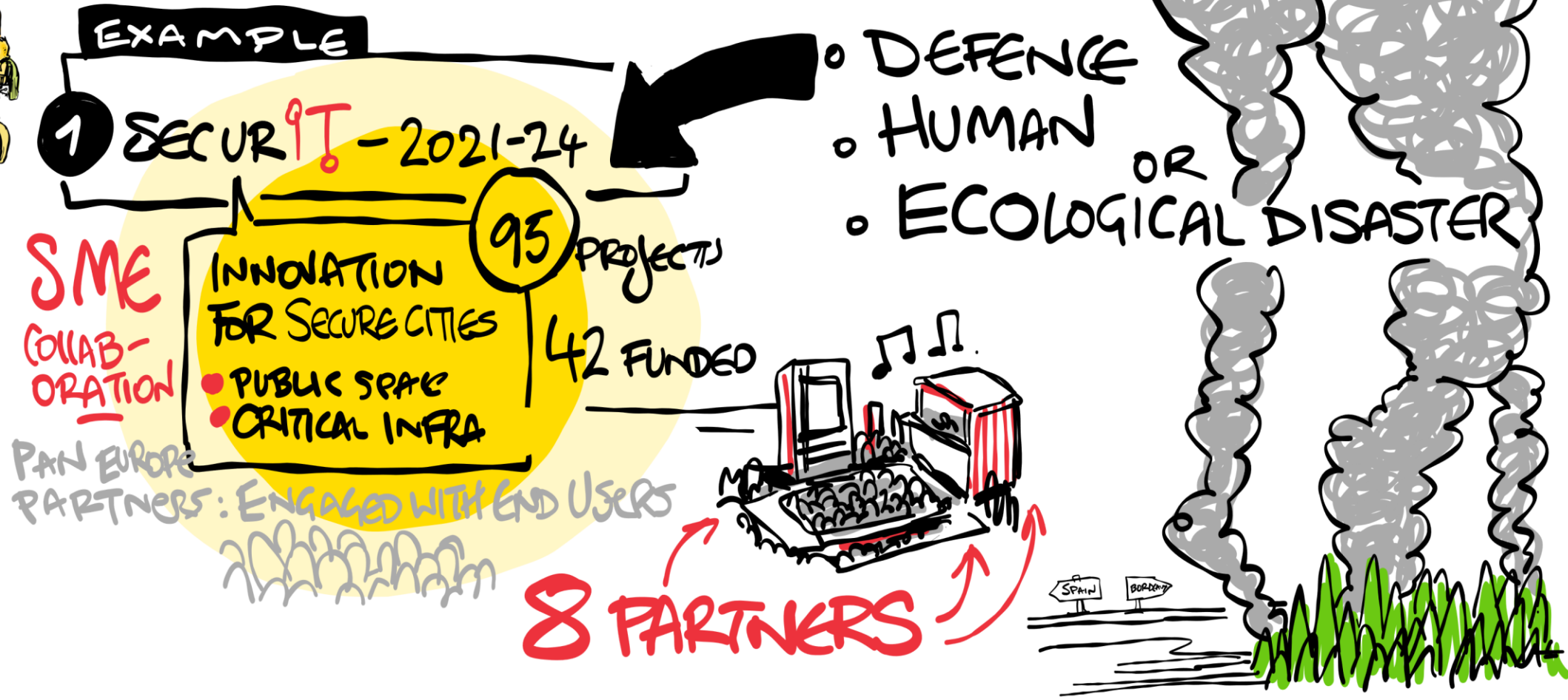
!! INTERCONNECTORS
& THE GRID(S)

! INTEGRATING
THE NEW
GROWTH

! IMPORT DEPENDENCY

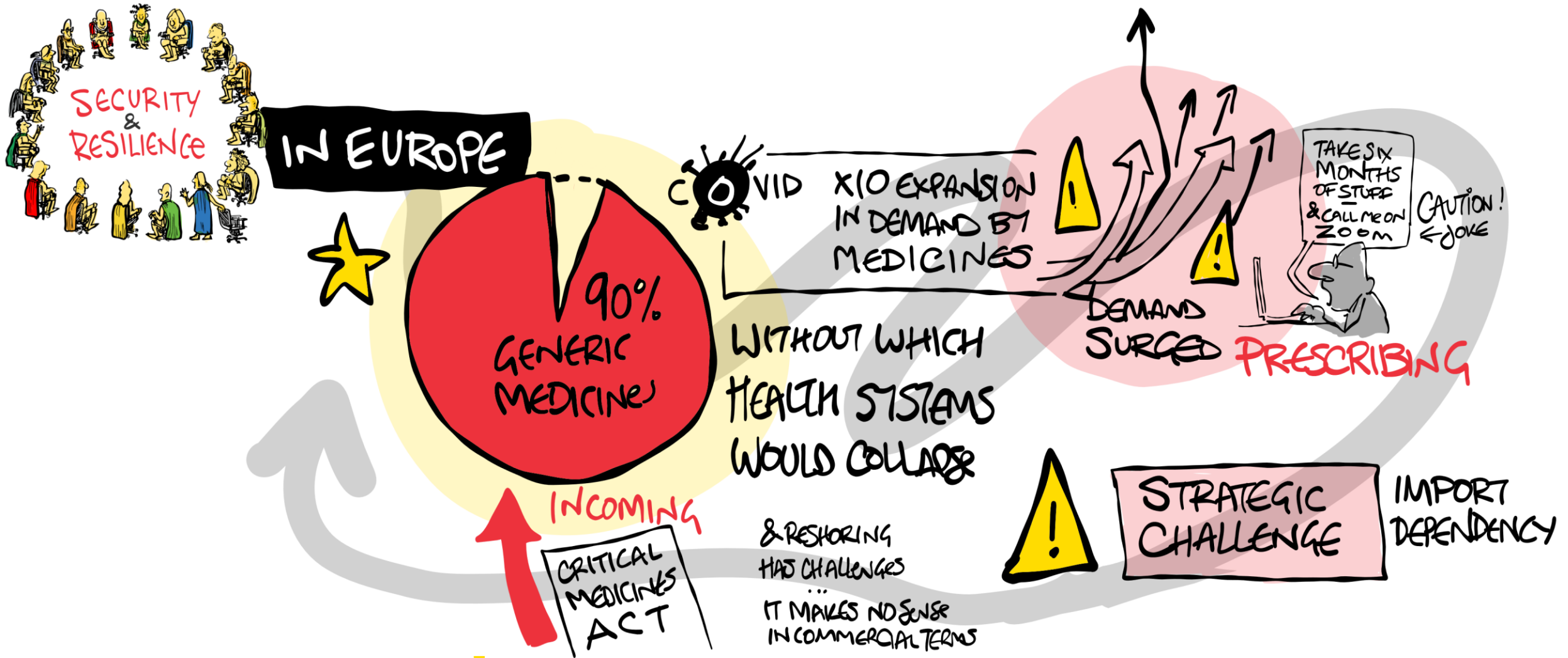
PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY

ADELINE GLEIZAL,
EU & INNOVATION PROJECT
MANAGER, SAFE CLUSTER



PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY

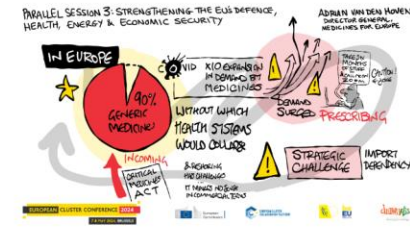
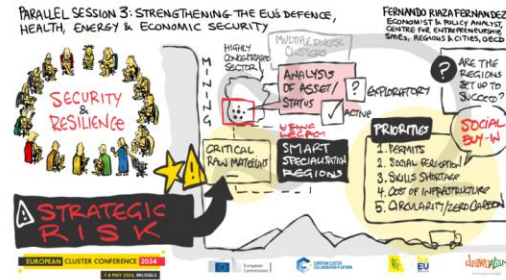
ADRIAN VAN DEN HOVEN,
DIRECTOR GENERAL,
MEDICINES FOR EUROPE



PARALLEL SESSION 3: STRENGTHENING THE EU'S DEFENCE, HEALTH, ENERGY & ECONOMIC SECURITY

MODERATOR:
ANAI'S LE CORVEC
NETWORK MANAGER, COUNCIL
OF EUROPEAN BIOREGIONS (CEBR)

#CONTEXT



EUROPEAN CLUSTER CONFERENCE 2024

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Boosting EU clusters' competitiveness through internationalisation

Global Gateway

Rigo Belpaire

Acting Head of unit E3 DG INTPA

Private sector engagement and employment





*“The **Global Gateway Strategy** is a template for how Europe can build more resilient connections with the world.”*

Ursula von der Leyen,
President of the European Commission

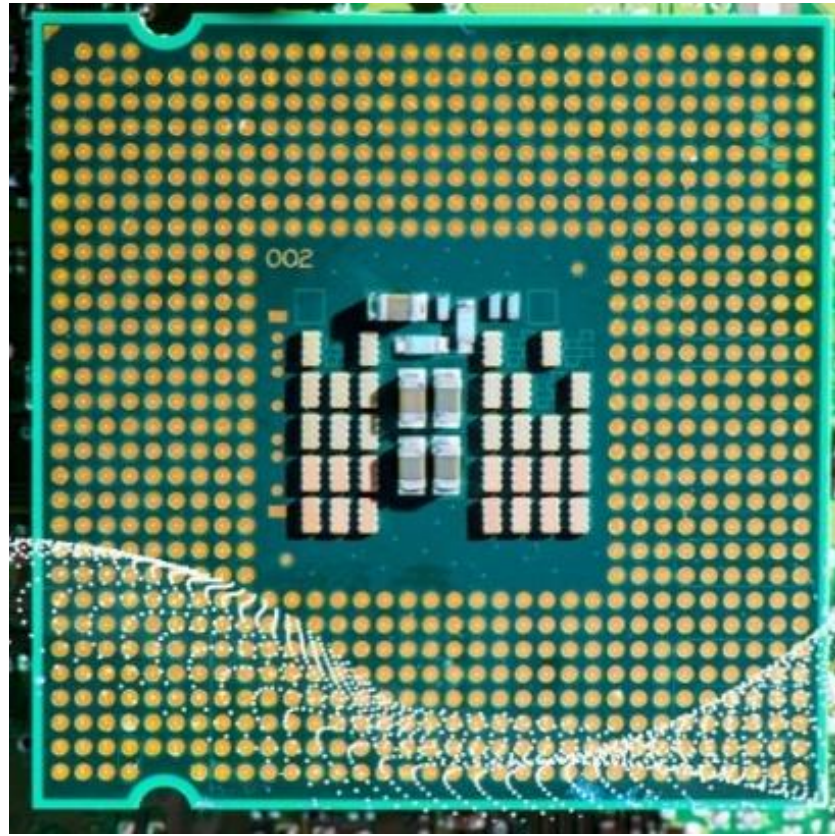
#GlobalGateway #TeamEurope

Global Gateway – What is it?



- ❖ a **new European strategy** to boost smart, clean and secure links in digital, energy and transport sectors and to strengthen health, education and research systems across the world.
- ❖ An **EU principles** and **value-based offer** to partner countries to position the EU more prominently in a competitive world.
- ❖ The EU's contribution to narrowing the **global investment gap** worldwide, fully aligned with the UN Sustainable Development Goals (**SDGs**) and the **Paris Agreement**.

Global Gateway – Key areas of partnership



Digital

Support open and secure internet



Climate & energy

Support investments and rules paving the way to the clean energy transition



Transport

Support all modes of green, smart and safe transport



Education & research

Invest in high quality education, with a focus on girls and women and vulnerable groups



Health

Strengthen supply chains and local vaccines production

Global Gateway – Investment mobilisation

Channels and modes of use:

€ 300 billion

€ 18 billion
Grants

- EU funded projects such as technical assistance, budget support, cooperation projects, etc.
- These can be implemented directly (tenders, budget support, etc.) or indirectly (implemented by EU MS, int. org., and DFIs)

**See section 4 for more information on EFSD+*

€ 135 billion

Investments (unlocked by guarantees)

- EFSD+ € 40 billion in guarantee will leverage up to € 135 billion investments
- Managed by the EIB and other financial institutions
- Contribute to **infrastructure projects** (coverage of sovereign loans - € 27 bn) and **local private sector development** (loans to MSMEs, off-take agreements and equity investments - € 13 bn)

€ 145 billion
Investments

- Equity investments
- Loans

Made by:

- EIB - European Investment Bank
- EBRD - European Bank for Reconstruction and Development
- EU DFIs

State of play

- ❖ **Global Gateway Board** provided **strategic guidance** in December 2022
- ❖ List of **Global Gateway flagship projects** to cover over 200 projects worldwide
- ❖ Methodology to **track total investment** implemented under Global Gateway
- ❖ Further alignment of full toolbox: involvement of the **private sector** (BAG), potential of **Export Credit Agencies**
- ❖ **GG communication strategy** in place, **toolkit** being prepared
- ❖ **Joint missions** to partner countries to strengthen visibility

Flagship example – MAV+

‘MAV+’ - the Team Europe Initiative on *Manufacturing and Access to Vaccines, Medicines and Health Technologies* - works with African partners to **strengthen their local pharmaceutical systems and manufacturing capacity.**

Partners:

Team Europe:

- EC, EEAS, European Medicines Agency, network of European regulators
- European and Developing Countries Clinical Trials Partnership (EDCTP)
- EU MS (funders): Germany, France and Belgium
- EU MS (supporters): Denmark, Hungary, Netherlands, Portugal, Czechia, Spain, Poland, Sweden, Malta, Austria, Italy, Lithuania, Greece
- EIB and bilateral banks

MAV+ creates an enabling environment for sustainable local manufacturing in Africa through 3 dimensions: the **supply side, the demand side and the enabling environment.**

African organisations:

- African Union Commission
- Africa Centres for Disease Control and Prevention
- AUDA-NEPAD (African Union Development Agency)
- African Medicines Agency
- African governments and national regulatory agencies

International partners:

- WHO
- Bill & Melinda Gates Foundation

Flagship example – MAV+

Expected tasks:

- Supply side: incentivise and de-risk investment into local pharmaceutical and biotech companies
- Demand side: consolidate demand, facilitate market integration, support use of locally produced goods
- Enabling environment: address the threat of substandard and falsified products and boost confidence in local goods by strengthening regulatory frameworks

Steps:

- ✓ May 2021: Initial €1 billion backing announced
- ✓ July 2021: Launch of MADIBA project in Senegal
- ✓ Feb. 2022: Announcement of €100 million funding by Team Europe and Bill & Melinda Gates Foundation
- ✓ March 2023: Zambia-EU Pharmaceutical Manufacturing Forum with 600 participants



Flagship example – Green hydrogen and CRM in Namibia

This GG flagship consists of developing **green hydrogen and Critical Raw Materials (CRM)** value chains in Namibia to support green transition. It promotes **local value addition** in Namibia.



It will include public and private **investments** along with **flanking measures** regarding investment climate, regulatory reforms, capacity building and TVET. It will also include the reinforcement of the **regional transport corridor** Maputo-Gaborone to Walvis Bay.

Stakeholders involved:

- Team Europe: The logos of the EU member states (Belgium, Germany, France, Netherlands, Finland) and the European Union flag are shown, along with the logos of the AFD (Agence Française de Développement), KfW, FMO (Entreprenersbank), giz (Deutsche Gesellschaft für Internationale Zusammenarbeit), and the European Investment Bank.
- Government of Namibia
- Private sector (Africa and EU. For ex: Ports of Rotterdam and Antwerp-Bruges)
- Geological Survey Institutes (Finland, Germany, France)
- European Raw Materials Alliance, European Battery Alliance
- USA and Japan (interest to collaborate)

Flagship example – Green hydrogen and CRM in Namibia

Expected tasks:

- Improve the business environment
 - Skills development and innovation
 - Support to sectoral reforms (EU: € 4.25m)
 - Provide guarantees to project lower risk (EFSD+)
 - Develop blended investments (private + public) (EC/EIB: € 25m)
- Implementation
 - Build an 85 MW solar plant and RH2 storage
 - Produce ammonia and RH2



Steps:

- ✓ Nov. 2022: **MoU signature** between Gov. of Namibia and the EU establishing a **strategic partnership** on Sustainable Raw Materials Value Chains and Renewable Hydrogen to ensure the development of a secure and sustainable supply of raw materials, refined materials and renewable hydrogen
- ✓ Nov. 2022: EIB and Namibia signed Joint Declaration to a potential **loan of up to €500 million** financing renewable hydrogen and renewable energy investments
- ✓ Oct. 2023: **Launch of roadmap** for 2023-2025 detailing the concrete actions in which the partnership will advance its goals, in close cooperation with EU and Namibia financial and private sector stakeholders.

Flagship example – The Lobito Corridor

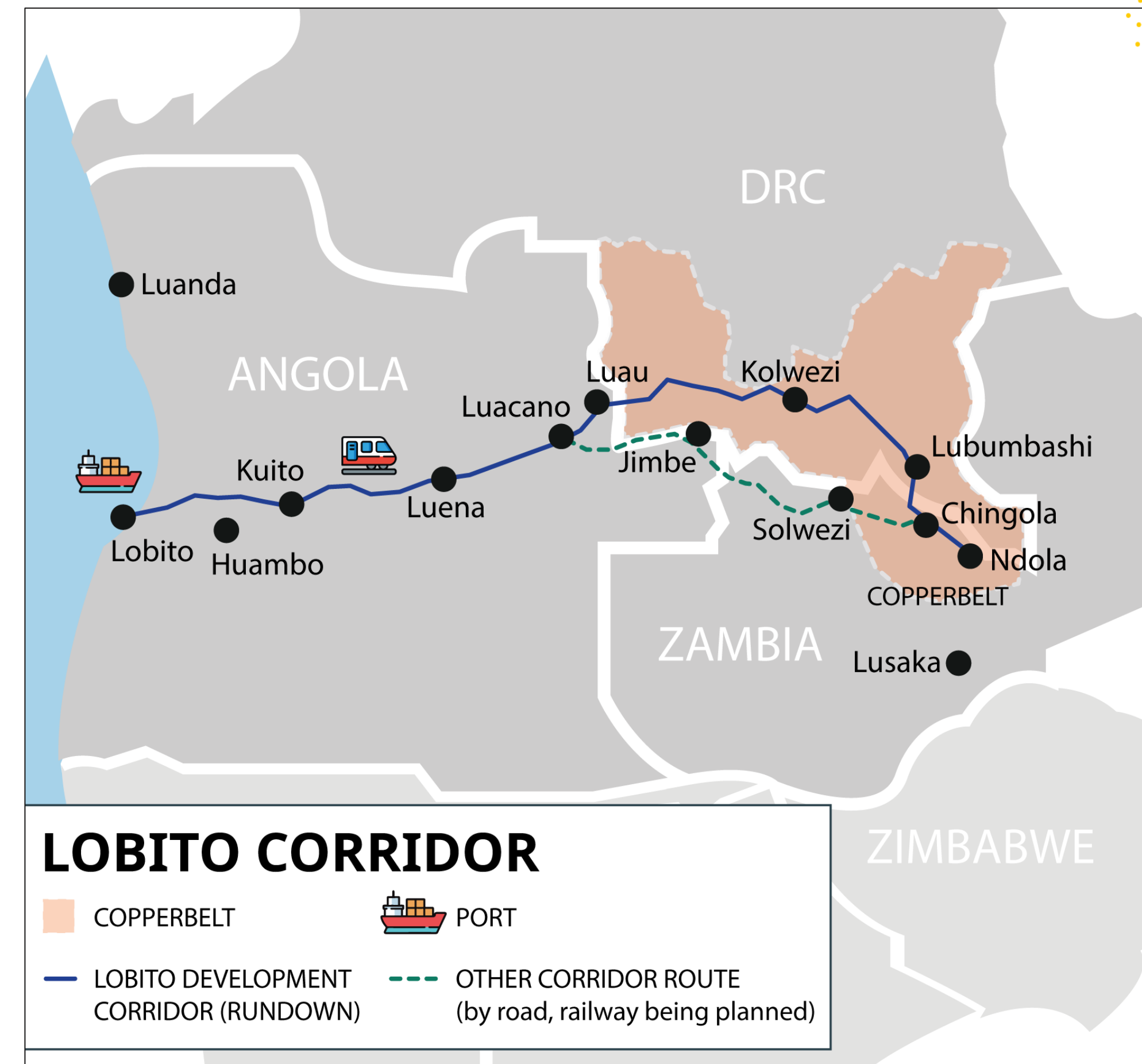
The Lobito Corridor is a **transport corridor** (railway line) that will connect the Port of Lobito in Angola to southern DR Congo and northwestern Zambia.

Some benefits: reduced logistical costs and carbon footprint of exporting/importing goods (minerals, agricultural goods, etc.); improved economic activity;

Expected cost: € 300-400 m (DRC) + € 2.5 - 3 bn (Zambia)

Stakeholders involved:

EU, USA, Zambia, Angola, DR Congo, African Development Bank (AfDB), Africa Finance Corporation (AFC).



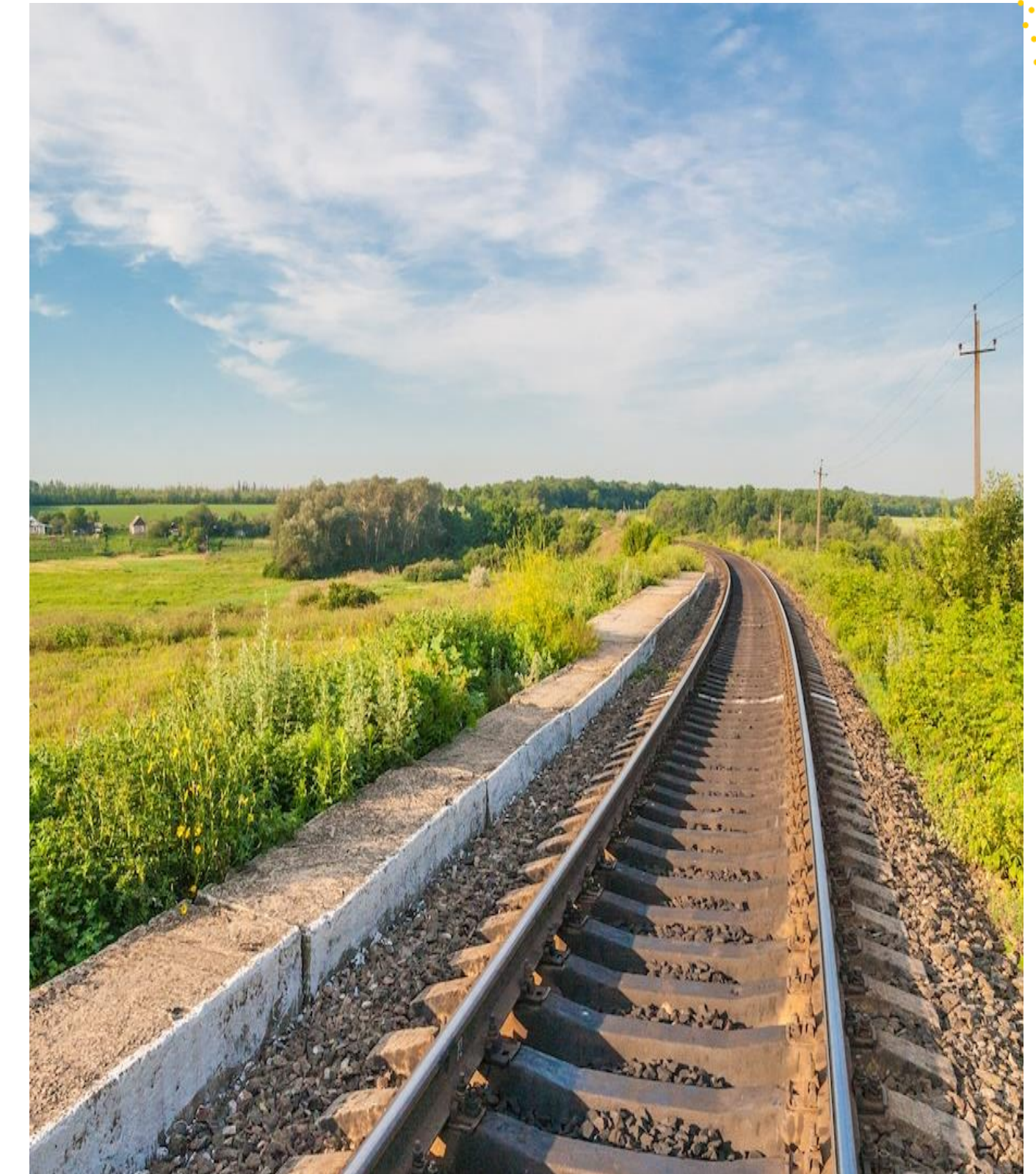
Flagship example – The Lobito Corridor

Tasks:

- Port of Lobito management and maintenance (Africa Global Logistics)
- Railway construction (~770 km)
- Railway rehabilitation (~420 km)
- Rail infrastructure management and maintenance (~1300 km) (Lobito Atlantic Railways, composed of Trafigura, Mota-Engil and Vecturis)
- Advisory, provision of equipment, investment around the corridor (ex: logistic platform for agri products)
- Improvement of business environment (customs, trade facilitation, etc.)

State of Play:

- ✓ July 2022: **Award** of a **30-year concession** (by the Angolan Government) to manage railway infrastructure (~1300 km) between the port of Lobito and Luau.
- ✓ Oct. 2023: **MoU signed** between the USA, the EU, AfDB, Zambia, Angola, the DRC to define the roles and objectives for the Corridor's expansion.
- Development of the **Roadmap** and identification of concrete projects



THANK YOU

INTPA-GLOBAL-GATEWAY@ec.europa.eu



Which area of the global south markets is of your interest?

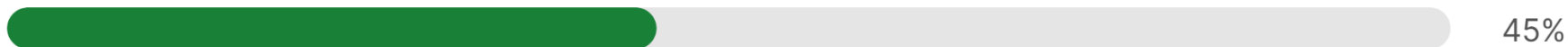
South America - 12 votes



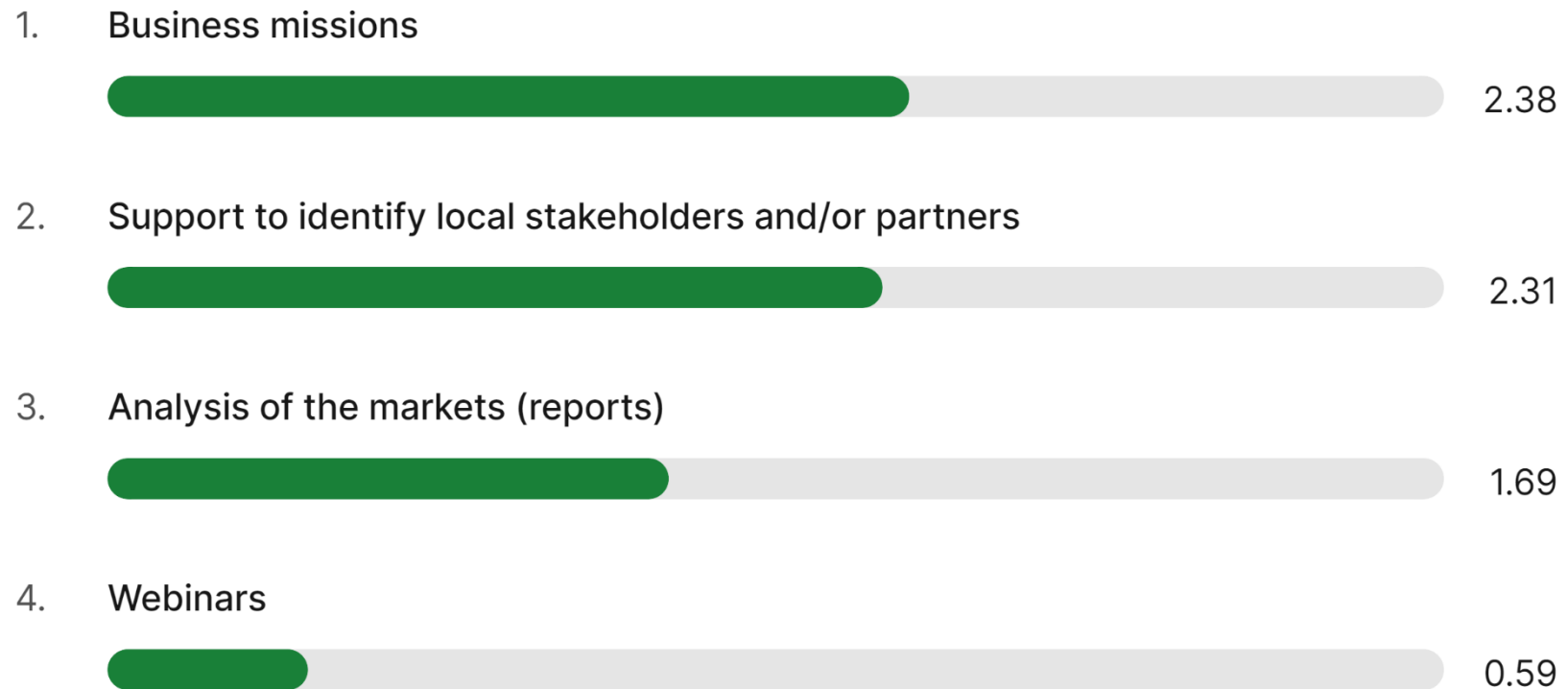
Africa - 23 votes



Southeast Asia - 19 votes



Categorize the importance of activities while doing internationalization activities for the SMEs



PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

GLOBAL GATEWAY!

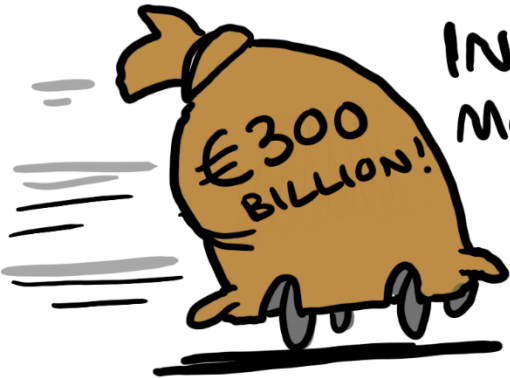


KEY AREAS:

- DIGITAL
- CLIMATE & ENERGY
- TRANSPORT
- EDUCATION & RESEARCH
- HEALTH

RIGO BELPAIRE,
ACTING HEAD OF UNIT, PRIVATE
SECTOR ENGAGEMENT,
DIRECTORATE-GENERAL FOR
INTERNATIONAL PARTNERSHIPS,
EUROPEAN COMMISSION

INVESTMENT MOBILISATION!



WE PROVIDE
STRATEGIC
GUIDANCE!



FLAGSHIP PROJECTS...

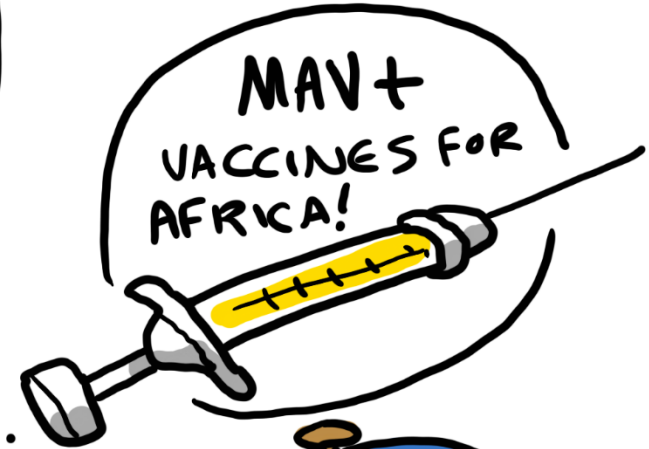


THE LOBITO CORRIDOR!!

ANGOLA

ZAMBIA

MAV+ VACCINES FOR AFRICA!

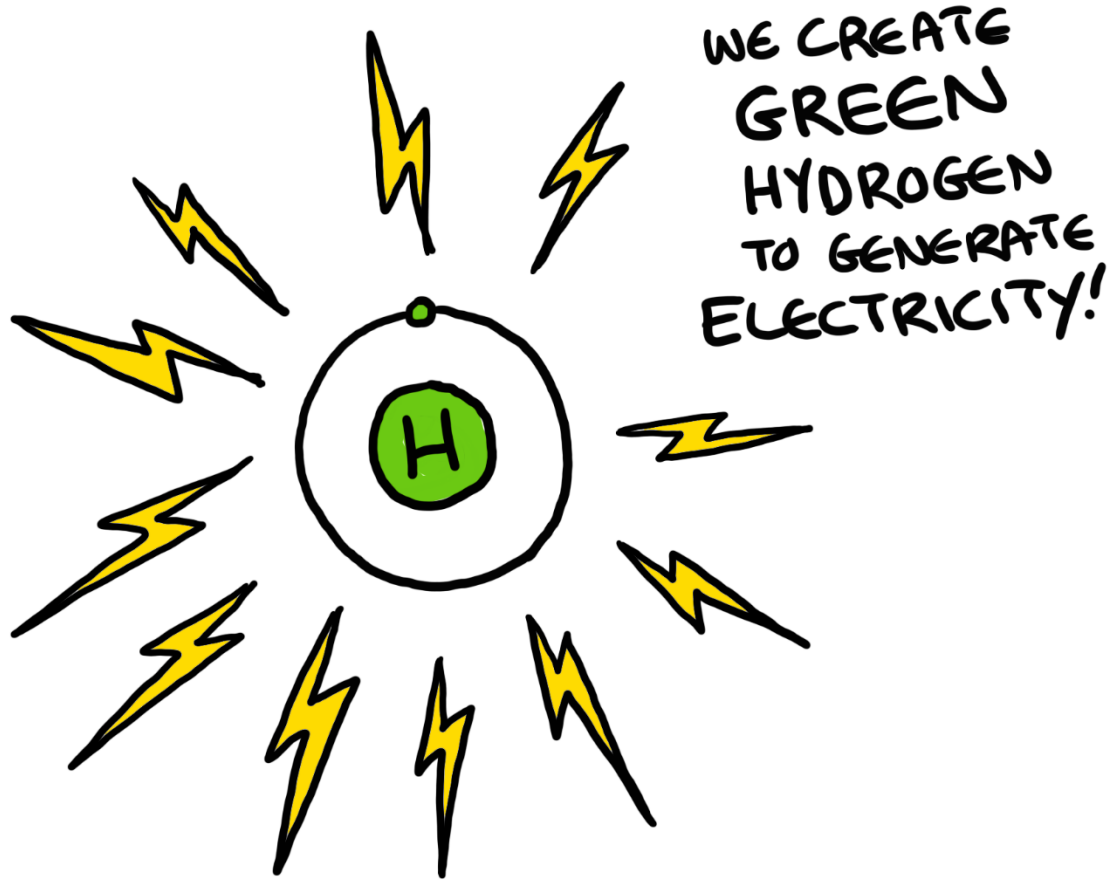


GREEN HYDROGEN IN NAMIBIA!



PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

SARA MARTÍNEZ,
BUSINESS DEVELOPMENT
MANAGER, FUNDACIÓN HIDRÓGENO
ARAGÓN

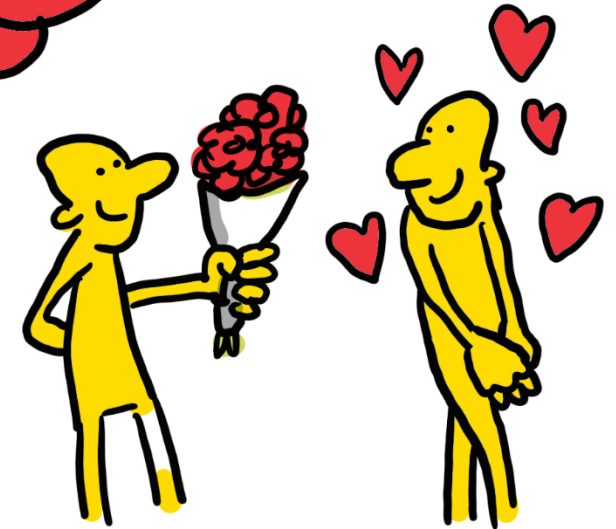


PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

LOUISE GUBANSKI,
INTERNATIONAL PROJECT
MANAGER, ECOLIANCE RLP



WE ALSO
OFFER
MATCH-
MAKING
EVENTS!



PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

OUR STAKEHOLDERS
ARE PART OF THE
QUADRUPLE
HELIX!



SILVIA BREMBATI,
PROJECT MANAGER, LE2C



..WITH A FOCUS
ON RENEWABLE ENERGY
& SMART GRIDS!

PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

VLADIMIR GUMILAR,
DIRECTOR, CONSTRUCTION
CLUSTER OF SLOVENIA

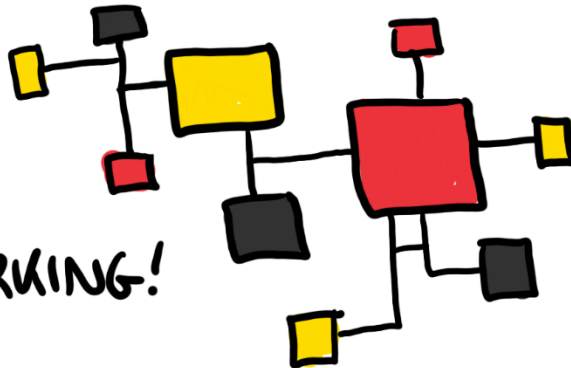


WE ARE
TALKING TO
SMALL &
MEDIUM
SIZED
CONSTRUCTION
COMPANIES!

..AND INTRODUCED
THEM TO CLIENTS
IN U.A.E, CANADA,
SINGAPORE, KENYA
...AND MANY MORE!

WE HELP OUR
MEMBERS WITH...

NETWORKING!



FOCUS
GROUP
MEETINGS!

MEMORANDUM
OF
UNDERSTANDING

...AND
FOLLOW-ON
MISSIONS!

PARALLEL SESSION 4: BOOSTING EU CLUSTERS' COMPETITIVENESS THROUGH INTERNATIONALISATION

MODERATOR:
ANDER GONZALEZ,
BASQUE ENERGY CLUSTER

WHAT DOES
YOUR CLUSTER
OFFER YOUR
MEMBERS
FOR SMES?

BUILDING
SERVICES
ARE MORE
CHALLENGING



IN BRAZIL

THERE WERE

16

ROWS AT
THE MISSION...

...ALL BUT TWO
WERE FROM
CHINA!



WE CREATED



FOR OUR
MEMBERS!



WE BUILD
A LONG-
TERM
STRATEGY!

WE OFFER
CONTACTS
FROM OTHER
CLUSTERS!

WE CAN
PROVIDE
TRAINING IN



SMES ARE
EURO-
BRANDED!

... AND WE
WORK WITH
LOCAL
STAKE-HOLDERS!

WE'VE BEEN
MEETING
WITH OTHER
WATER
CLUSTERS!

EUROPEAN CLUSTER CONFERENCE 2024

7-8 MAY 2024, BRUSSELS



European
Commission



drawnAlism
drawing knowledge