ევროკავშირი
საქართველოსთვის
The European Union for Georgia

TWINNING

EU ENI East Twinning project
Supporting inter-sectoral collaboration possibilities between
Research and Industry
GE 18 ENI OT 02 19

# Identification and setting of scientific priorities in Georgia

## 28 September 2022

science KNOW

business GROW

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

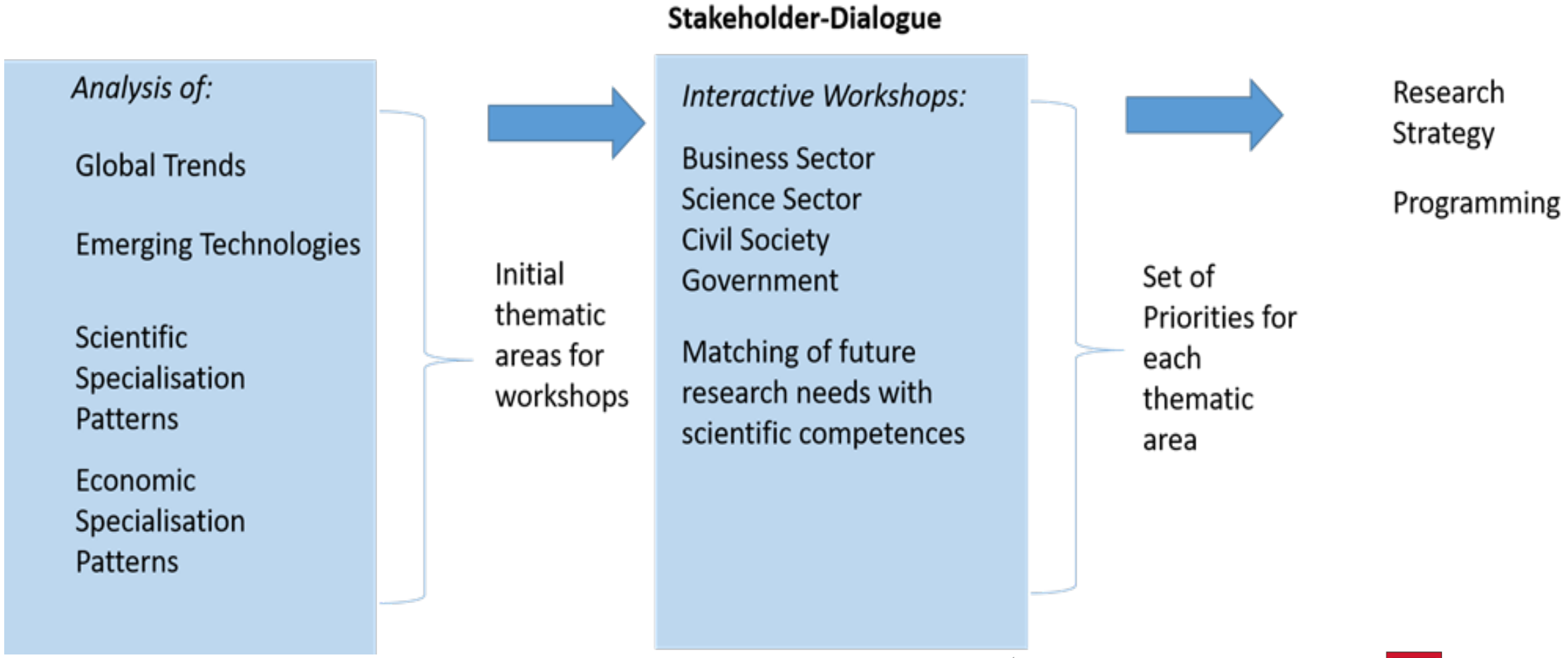
JOANNEUM RESEARCH

FWF
Der Wissenschaftsfonds.

DLR Projektträger

FFG
Promoting Innovation.

# The priority setting process



# What are Priorities

## Functional Priorities

- refer to **generic challenges** in a national or regional science and innovation system
- address issues such **as technological diffusion**, start-ups, academia-business linkages, **qualification**, IPRs, etc.
- **complement** thematic priorities and may also have a **cross-cutting** character

## Thematic Priorities

- address **research needs** from Society and/or the Business Sector
- aim at **fostering collaborative actions** of industry and the science sector
- Examples:

# Initial Priority Domains

## Criteria

- **Strong national science base** (i.e. specialisation patterns based on bibliometrics and / or patenting)
- **High national economic relevance** (i.e. high share in employment, high expert shares, strong economic growth, cluster development)
- **Global challenges** and / or **priorities** (e.g. climate change)

## Priority Domains

- Information and Communication Technology (ICT)
- Arts and Humanities/Cultural Heritage
- Innovative Medicine
- Food and Agriculture
- Renewable Energy
- Circular Economy

# Initial Priority Domains and Subfields

| Priority Domain | Subfields |
|---|---|
| ICT | • Research to support the development of Innovative Health Systems<br>• Cybersecurity<br>• Artificial Intelligence |
| Arts and Humanities/Cultural Heritage | • No subfields |
| Innovative Medicine | • Research to support the development of Innovative Health Systems<br>• Bacteriophages<br>• Herbal Medicine |

# Initial Priority Domains and Subfields

| Priority Domain | Subfields |
|---|---|
| Food and Agriculture | • Research to support Food Quality and Safety<br>• Future Farming and Agricultural Technologies |
| Renewable Energy | • Research to support the development of Circular Economy<br>• Green Hydrogen<br>• Solar Energy |
| Circular Economy | • Research to support the development of Circular Economy<br>• Circular Economy for Construction and Demolition Waste |

# IT - Cybersecurity

## Functional Priorities

- Development of a national technological knowledge base:
  - Education and Training of Cybersurity Specialists
  - Programming skills and advanced knowledge in mathematics (Students, with soldiers)
- Creation of awareness of IT issues (e.g. Cybersecurity) among companies
- Integration of cybersecurity policies into standards and guidelines

# IT - Cybersecurity

- Programs minimizing the risk of economic damage due to malfunctions or manipulation of sensitive data
- Security by design
- Software solutions for critical infrastructures

**Thematic Priorities**

# Arts and Humanities/Cultural Heritage

## Functional Priorities

- Legislative support: Protection of Copyright and other IPR
- Human resources: promotion of academic training; education at school
- Provision of creative (multifunctional) spaces including technological infrastructure for prototying (e.g. furniture)

# Arts and Humanities/Cultural Heritage

## Thematic Priorities

- Digitisation: Digital Storage and preservation; combining needs of cultural heritage and new digital methods
- Statistical data on culture, and economics of culture; Survey of creative industry/cultural heritage
- Interdisciplinar projects combining science/technology with Arts & Humanities

# Innovative Medicine- support the development of Innovative Health Systems

## Functional Priorities

- Adoption of EU regulatory frameworks; e.g. EC Directive 10/63 (on the protection of animals used for scientific purposes), Regulation on biomedicine
- Development of a national knowledge base: long term development of capacities for education and training of young scientists
- Provision of shared laboratory spaces for companies
- Make existing research capacities visible for business

# Innovative Medicine- support the development of Innovative Health Systems

- Creation of new types of analgesic drugs

## Thematic Priorities

# **Agriculture and Food -** Research to support Food Quality and Safety

## Functional Priorities

- Provision of safe and reliable testing and diagnostic laboratories operating across the country
- Filling the gap on Legal and political regulations / to fulfill the European requirements on regulations (accreditation requirements)
- Development of a national knowledge base for Food safety and quality

# **Agriculture and Food -** Research to support Food Quality and Safety

## Thematic Priorities

- Overall risk assessment and analysis for emerging risks in food safety and quality
- Digitalization of agriculture system, monitoring ands analysis of big data to identify challenges

# Renewable Energy - Development / Research Capacities and Infrastructure

## Functional Priorities

- Capabilities and training: Need for courses for renewable energies, in-depth training both for researchers and professionals
- Research infrastructures and Demonstrators for Renewables (e.g. solar, wind)
- Creation of public awareness to the benefits of renewable energy

# Renewable Energy - Development / Research Capacities and Infrastructure

## Thematic Priorities

- Weather forecasts with high Geo resolution
- Data on (local) energy demand and supply; Data on resources and potentials for renewables with high Geo resolution
- Impact of climate change on the potential future yield of water power plants
- Smart Grids and Micro grids

# Circular Economy - Research to support the development of Circular Economy

- Development of research infrastructures
- Development of academic traning courses on circular economy
- Development of a national monitoring and information system on waste streams

**Functional Priorities**

# Circular Economy - Research to support the development of Circular Economy

## Thematic Priorities

- Mapping of Circularity for different products in Georgia's Economy
- Recycling of food waste

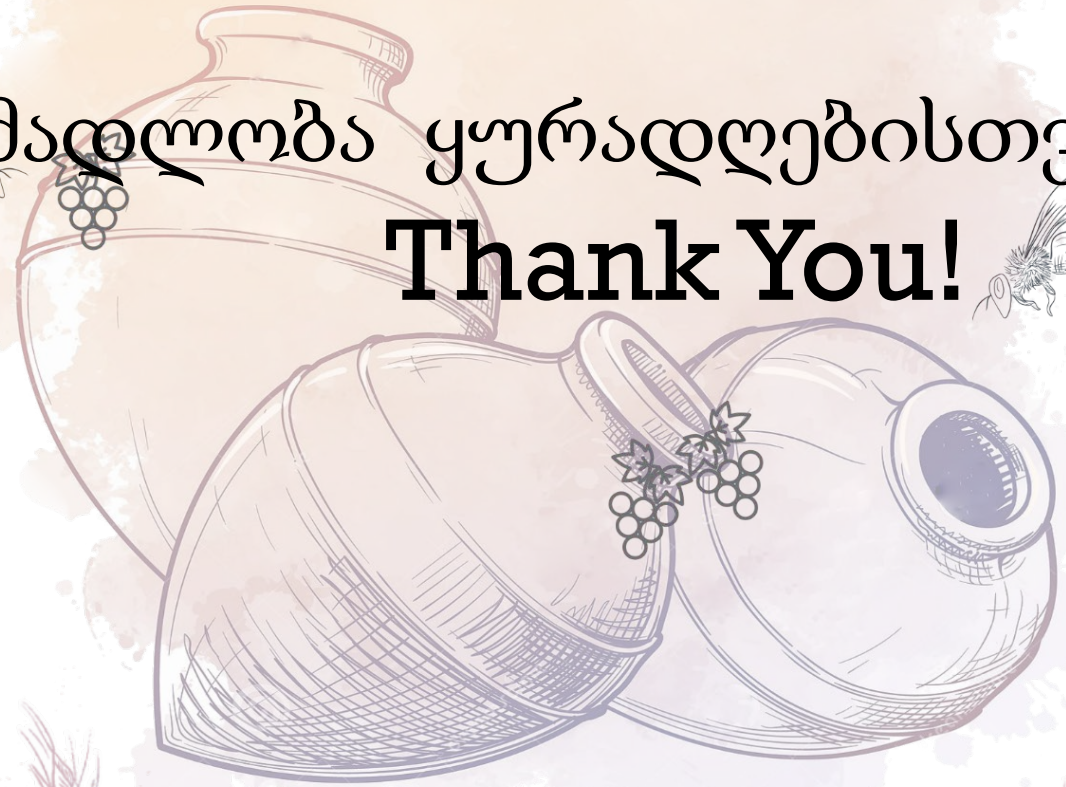
ევროკავშირი საქართველოსთვის
The European Union for Georgia

TWINNING

EU Twinning in Science-Business links

# მადლობა ყურადღებისთვის

# Thank You!



science KNOW

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

JOANNEUM RESEARCH

FWF
Der Wissenschaftsfonds.

DLR Projektträger

FFG
Promoting Innovation

business GROW