



WORKSHOP
Energy Big Push



Axis III – Incentive Mechanisms
Main lessons from international experience and preliminary proposal to accelerate Brazilian energy transition



Energy Big Push – Axis III: goals/results



01

MAIN GOAL: Conduct studies and research for indicating strategic lines and priority instruments to promote investments in sustainable energy solutions



02

METHODOLOGY: articulation with the promoters and partners of the Energy Big Push its Working Group 3 (incentive mechanisms)



03

EXPECTED RESULTS: Report indicating strategic lines and priority instruments to promote investments in SES



Working group 3





Tasks of Axis III

TASK 1

Mapping of national instruments

Analyze the main barriers for SES promotion



TASK 2

Selection of international best practices in the investment promotion in SES focused on innovation



TASK 3

Evaluation of the learned lessons and the applicability for the Brazilian case

Preliminary proposal of strategic lines and priority instruments



TASK 4

Final proposal of strategic lines and priority instruments to accelerate to Brazilian energy transition





TASK 1 – BRAZIL: MAIN ACTIVITIES



Overview of the evolution of the renewable energies



Review of the legal framework for innovation



Incentive mechanisms: RD&D activities and innovation



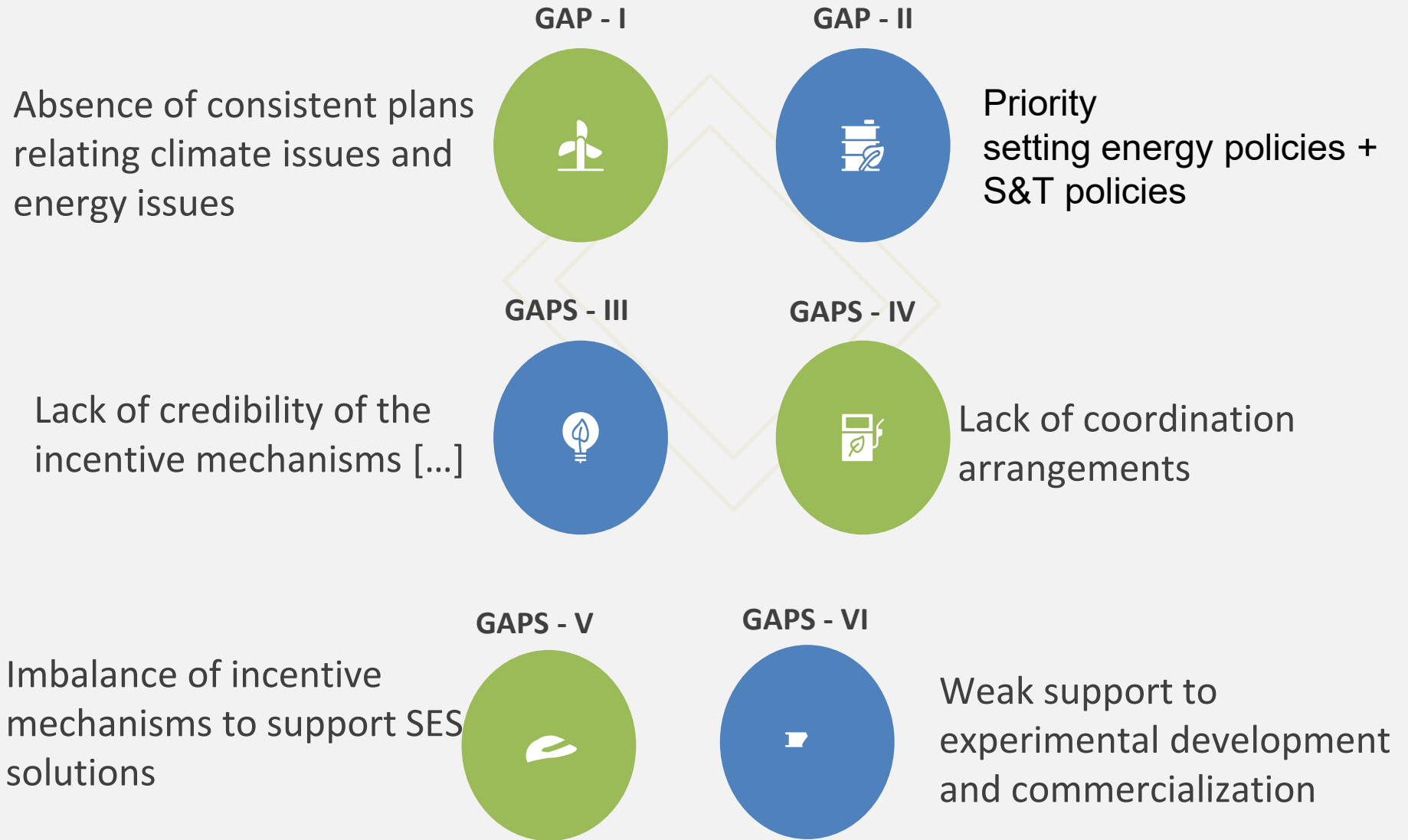
Incentive mechanisms available in Brazil: market support



Diagnoses: credibility, coherence, incentives balance...



TASK 1 –RESULTS





Task II - INTERNATIONAL EXPERIENCES



UNITED KINGDOM



GII: 5°
GEII: 9°
*

Global leader in offshore wind power

DENMARK



GII: 7°
GEII: 10°
*

Worldwide leadership concerning both wind power and biofuels

JAPAN



GII: 15°
GEII: 3°
*

Solar energy production increased 207.8% since 2010

NORWAY



GII: 19°
GEII: 1°
*

40% of its TPES relies on hydropower

CHILE



GII: 51°
GEII: 20°
*

Leadership in solar power production

FINLAND

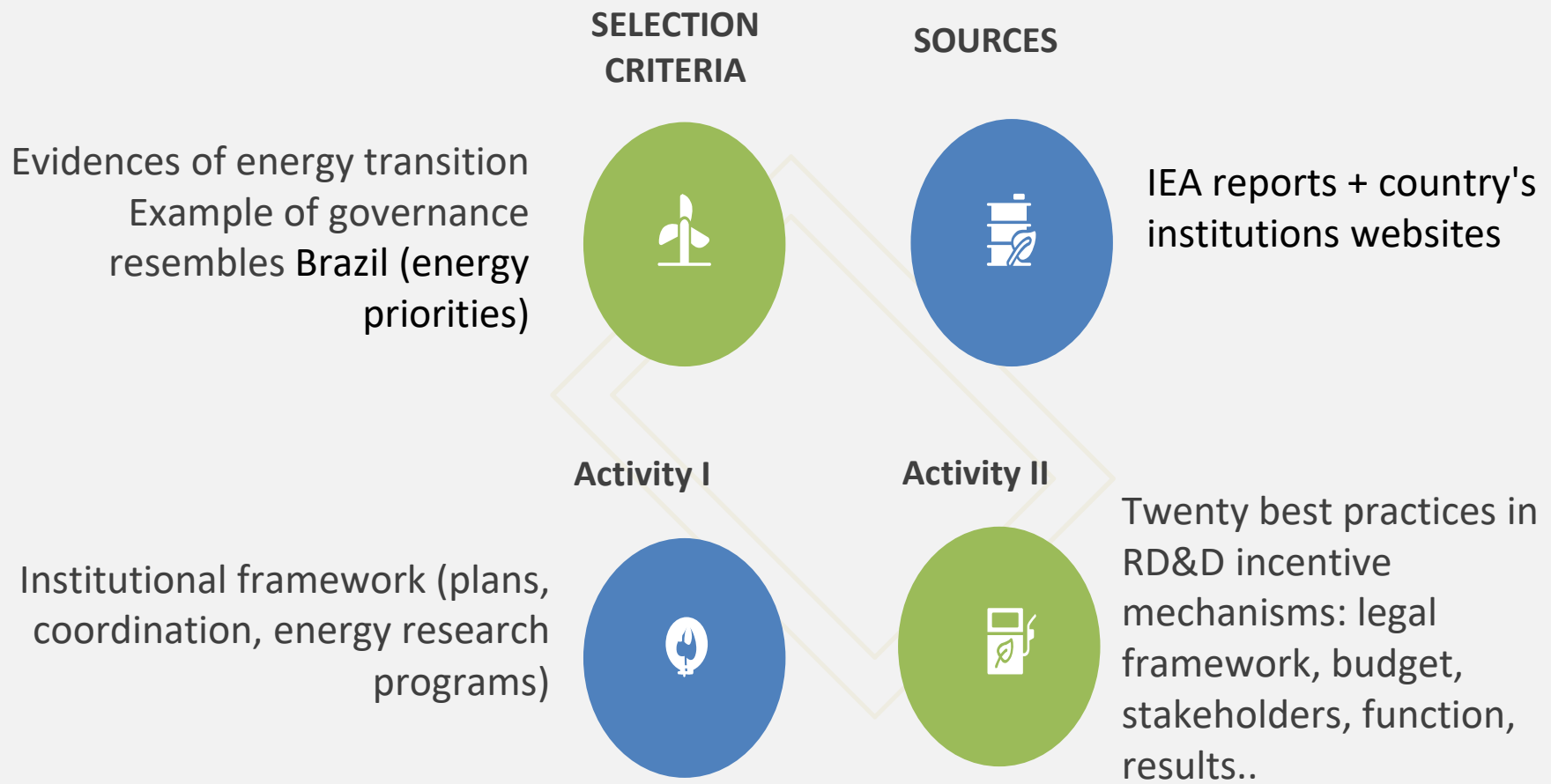


GII: 6°
GEII: 2°
*

Near 100% clean energy domestic production



Task II – METODOLOGY AND MAIN ACTIVITIES



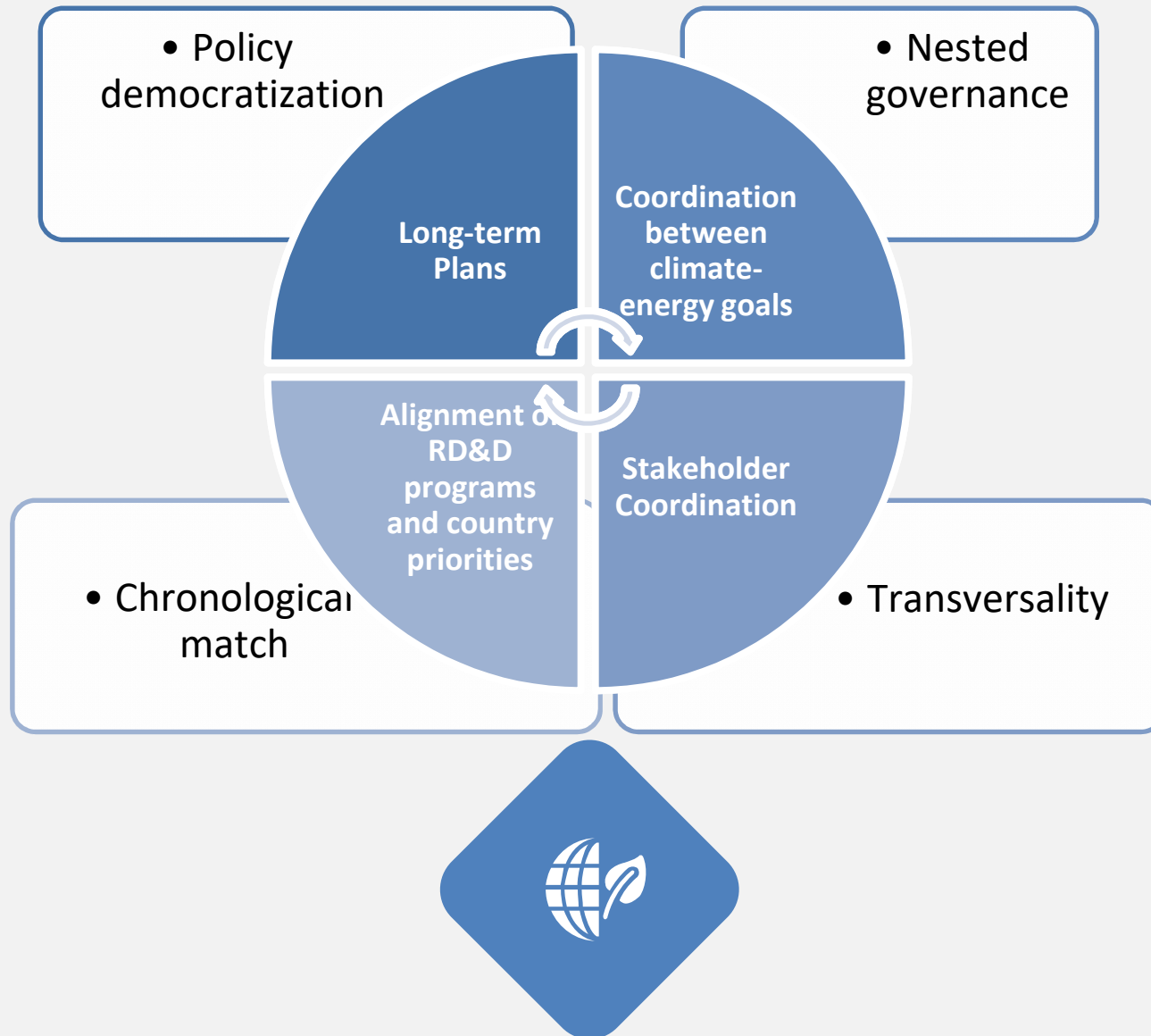


Task III – SUMMARY OF RESULTS





Task III – Lessons (I – IV)





Task III – Lesson V: Incentive Balance

Provide resources (to
“push” innovation)

Generate knowledge
(base for innovation)

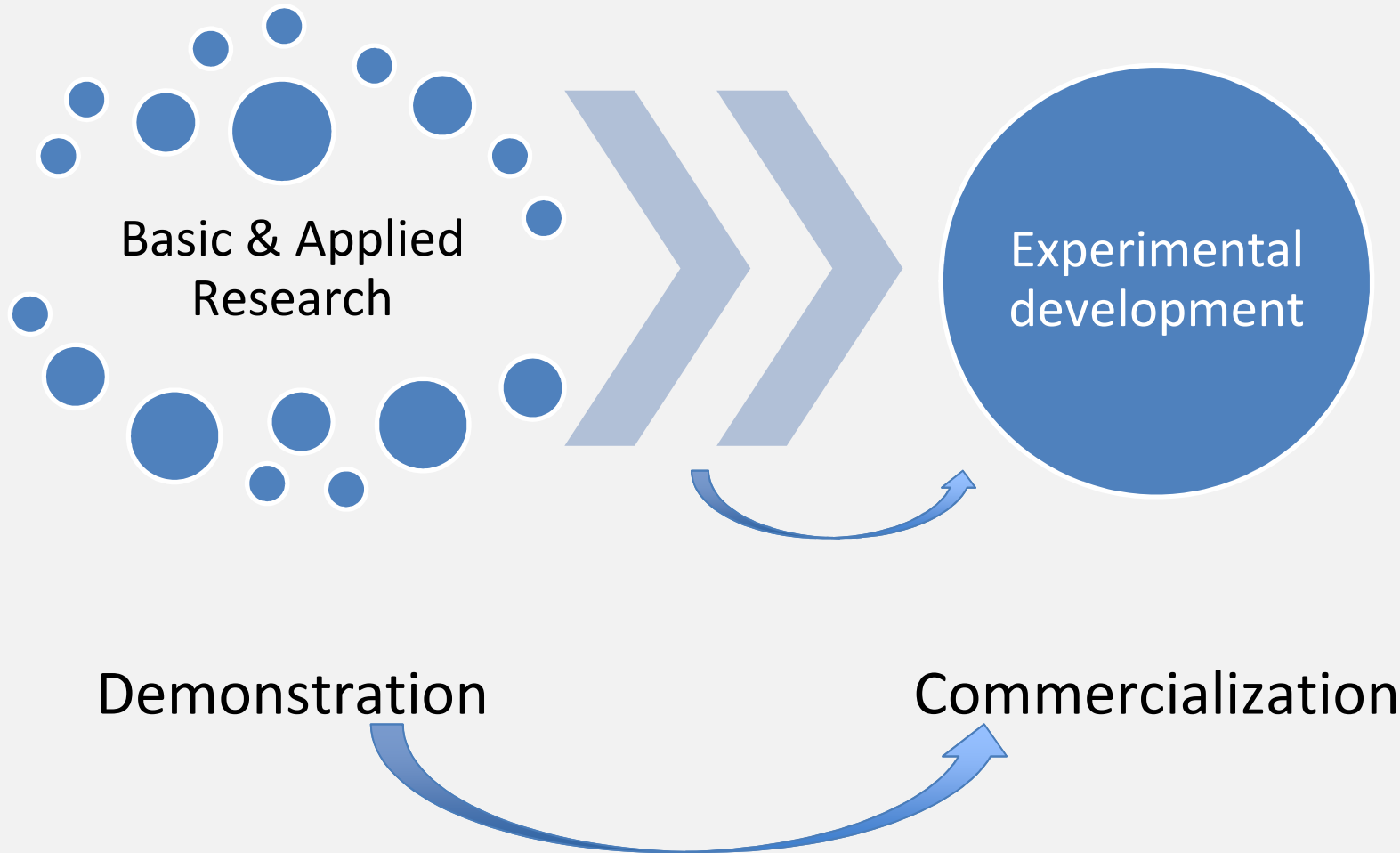
Policy mix

Support markets (to
foster deployment)

Mobilize society (to
promote engagement)

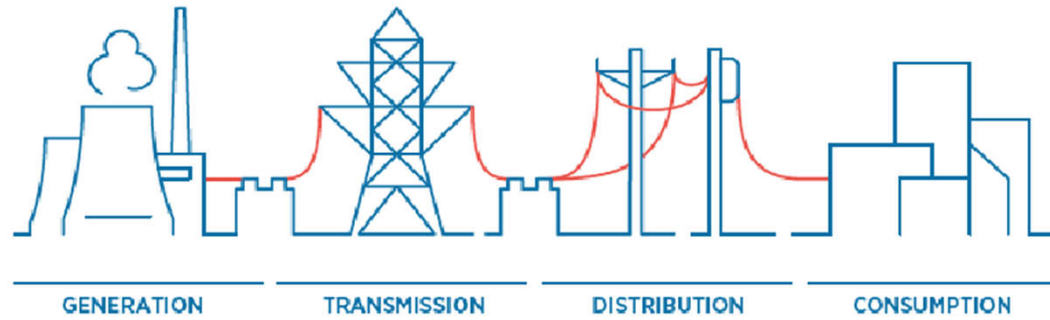


Task III – Lesson VI + VII: strong support to all stages + creating bidges

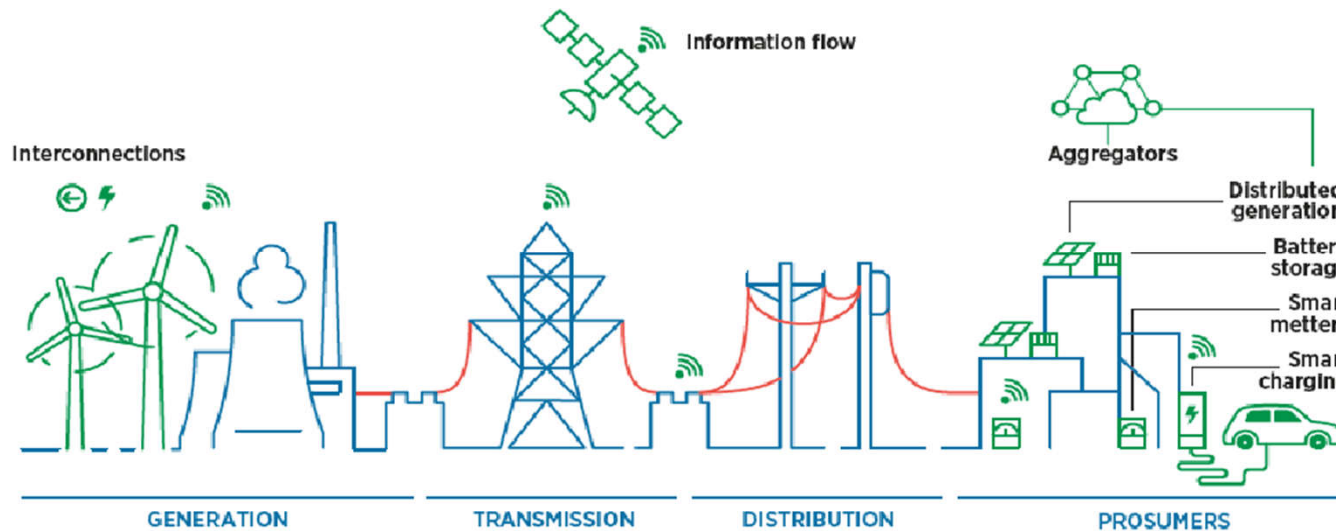




Task III – Lesson VI: focus on the transformation of the energy system

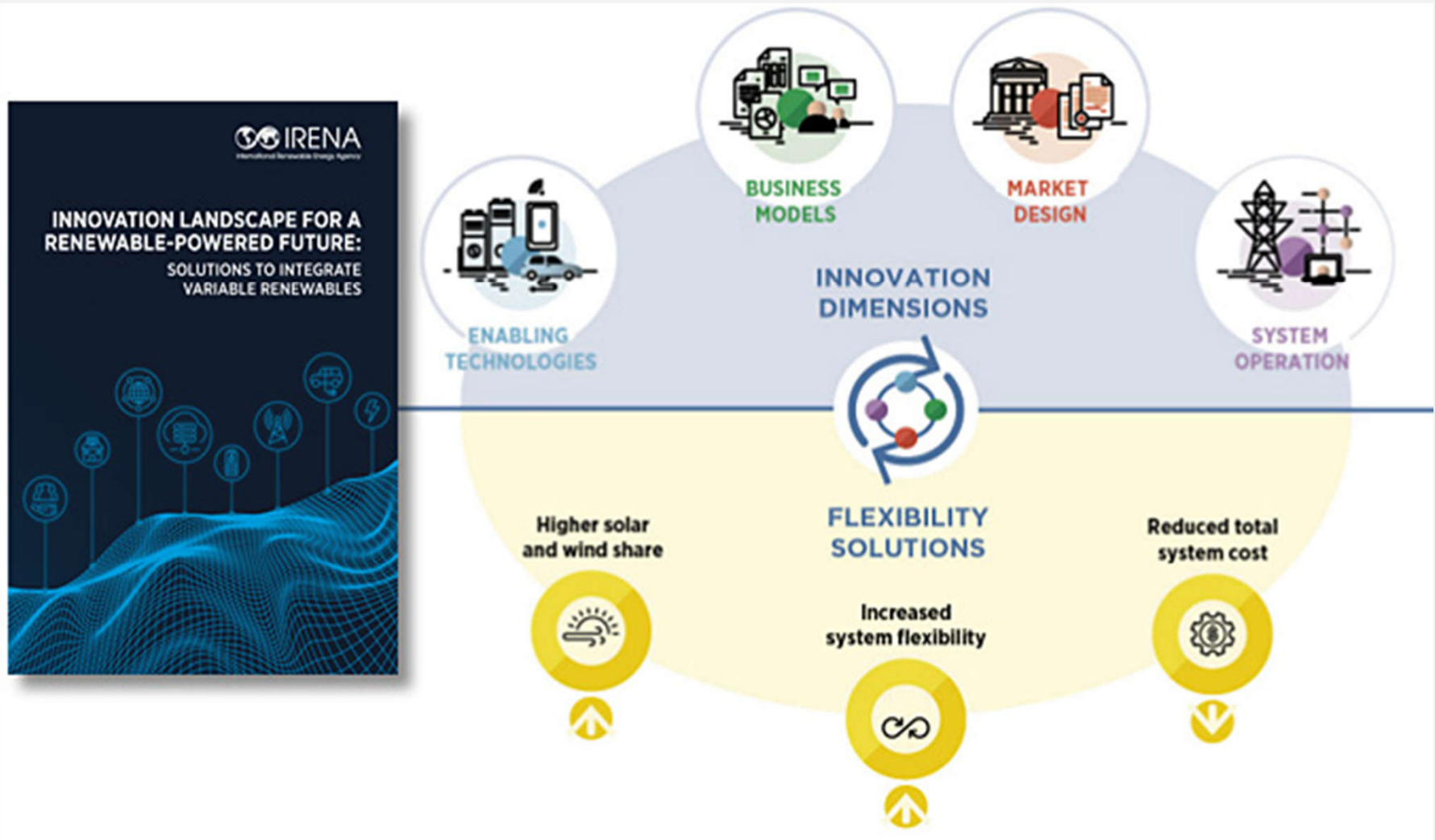


NEW PARADIGM OF THE ENERGY SUPPLY CHAIN



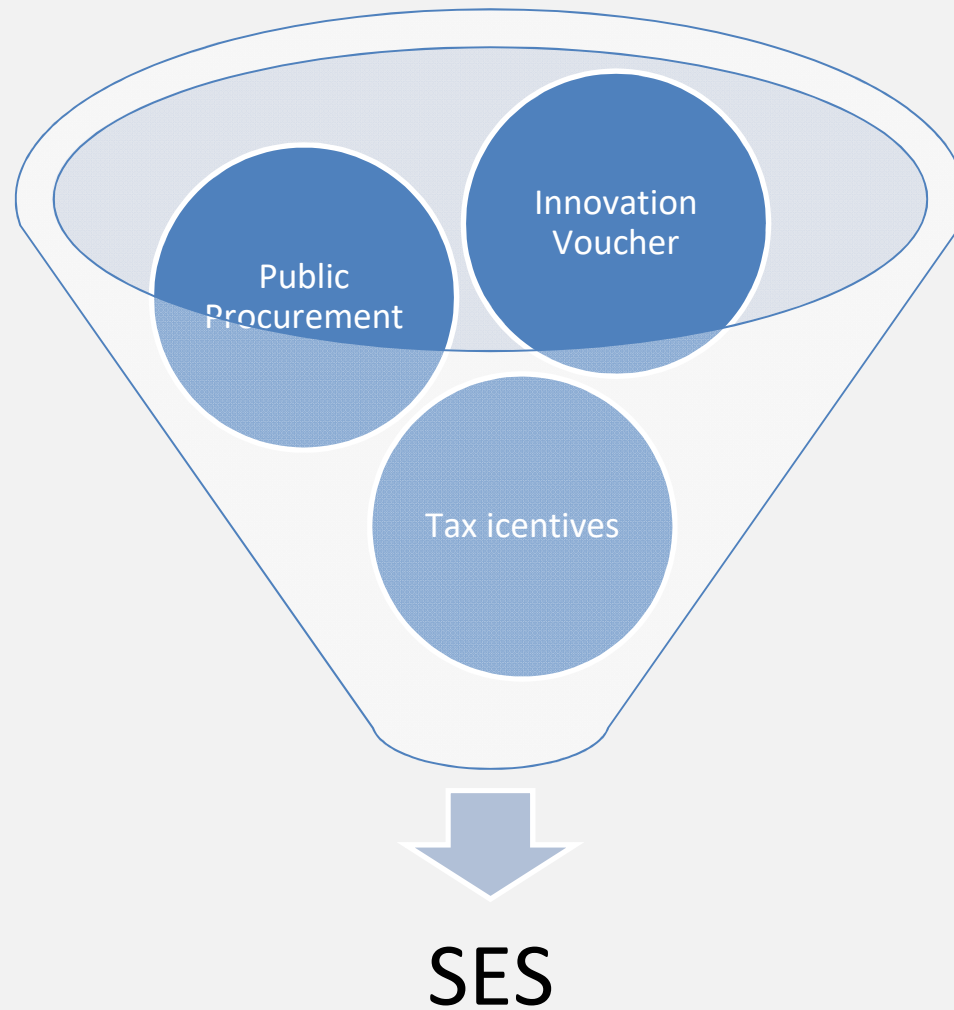


Task III – Lesson VIII: focus on the transformation of the energy system





Task III – Lesson IX: Enhancing the incentives available





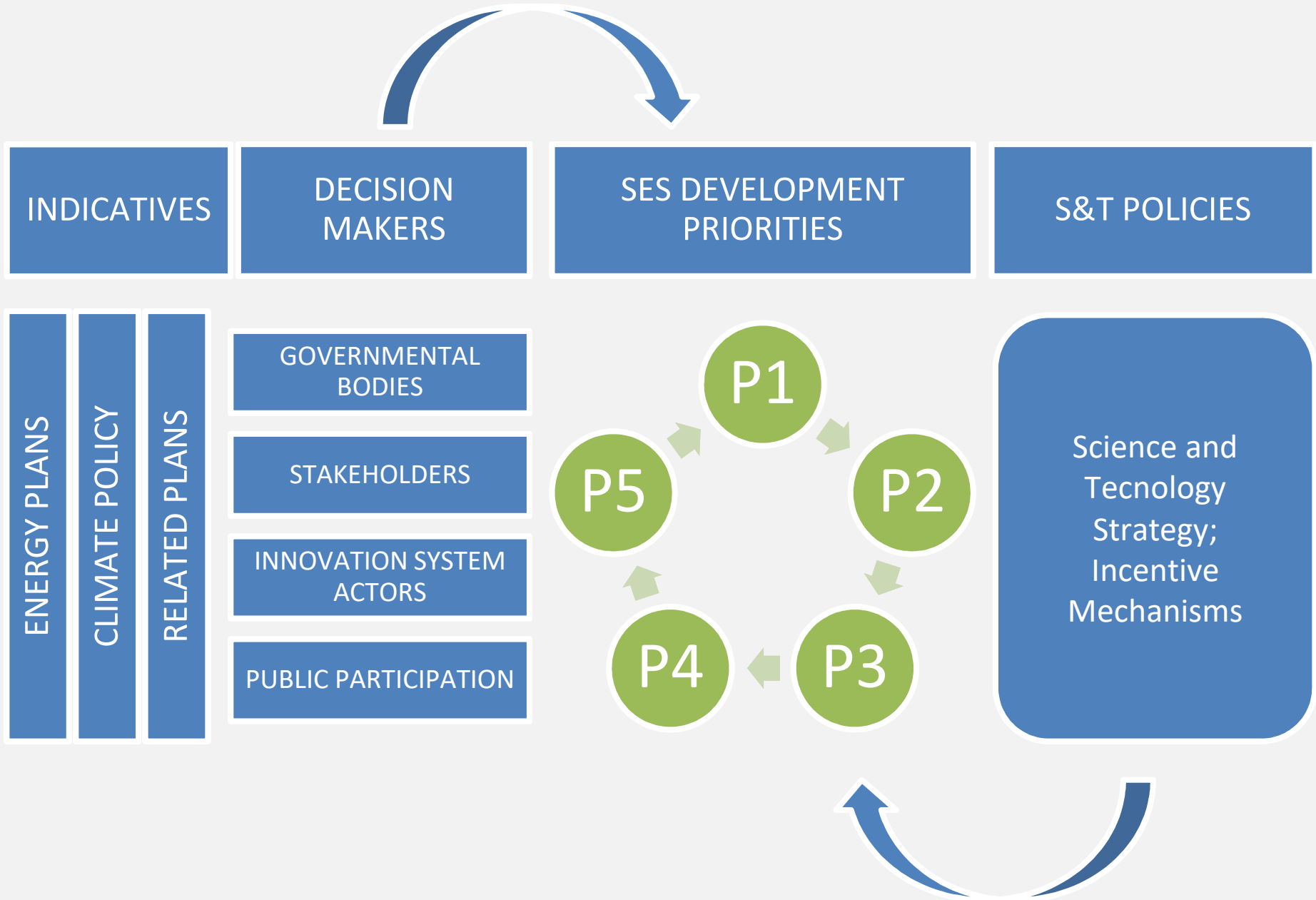
Task III – Lesson X: International collaboration



Source: <https://www.energypartnership-tunisia.org/home/>



Preliminary Proposal Synthesis





Task III - Strategic Agenda: main action lines

1. Articulation and coordination of policy makers



2. Barriers and opportunities in SES



3. Priority setting for SES



4. Creating bridges



5. Strengthening support to RD&D&I



1. Articulation and coordination of policy makers

EPE, ANEEL, ANP, ONS

MME, MMA, MI, MAPA,
ME, MCTIC

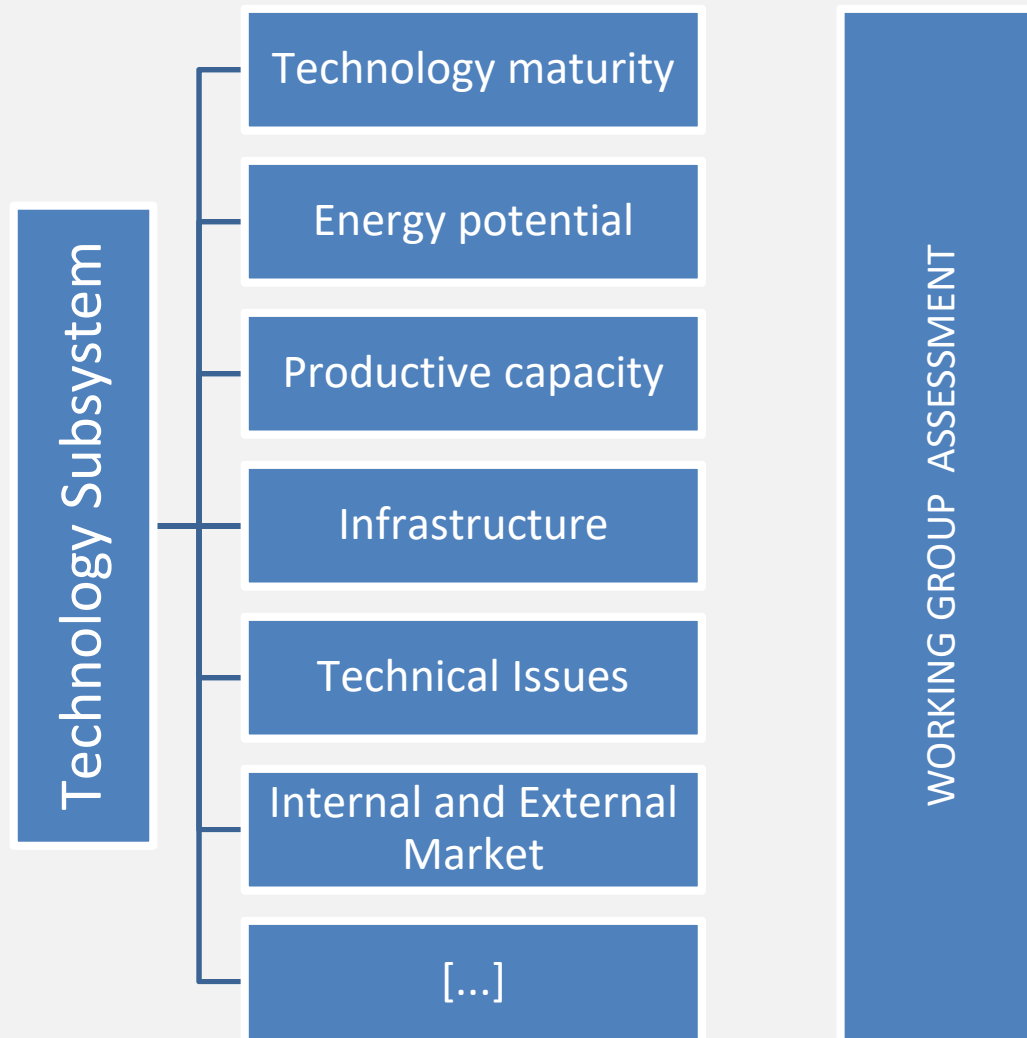
Transition
Committee

FINEP, BNDES, EMBRAPII

CNPq, INMETRO

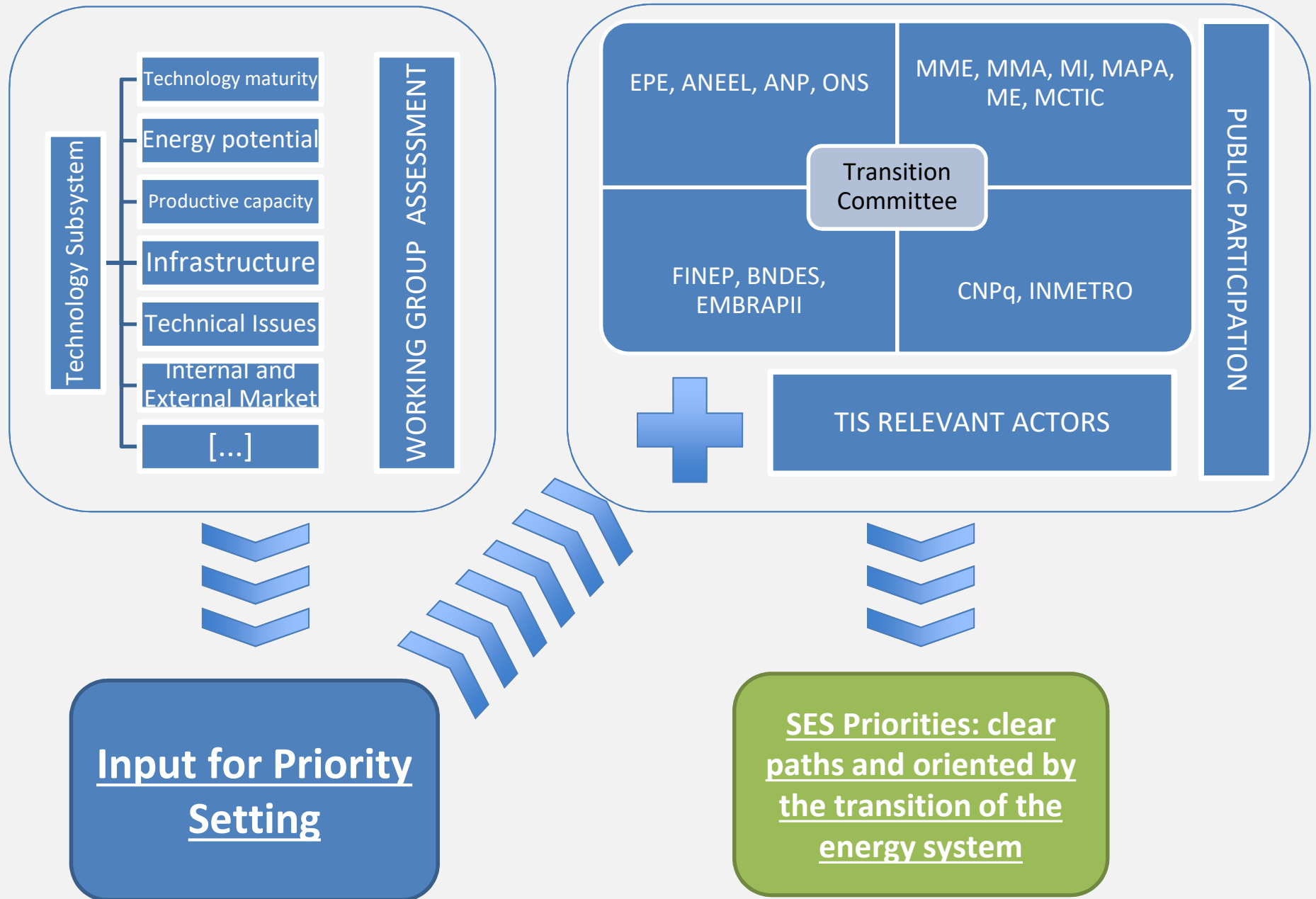


2. Barriers and opportunities in SES





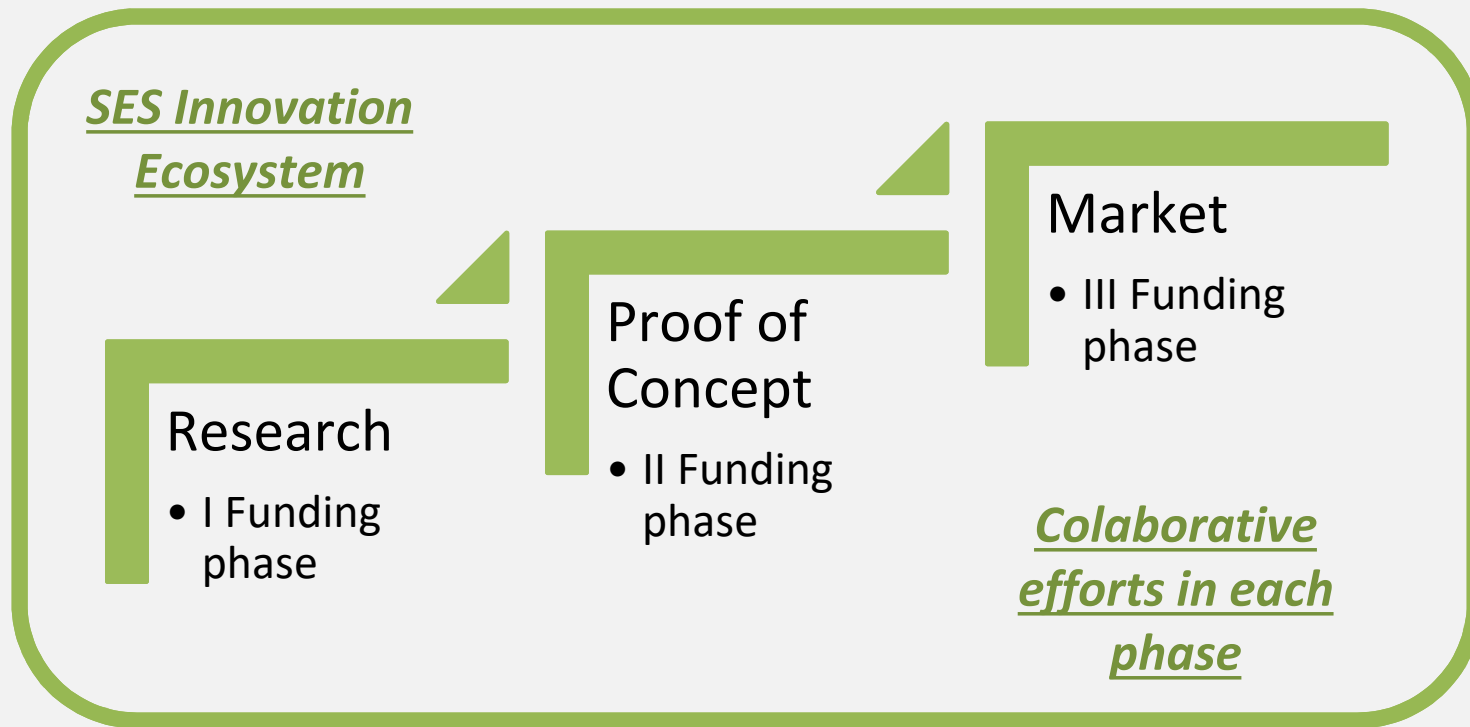
3. Priority setting for SES





4. Creating bridges

- *4.1. Implementation of programs and incentive mechanisms to connect the different stages of the innovation process*
- *4.2. Implementation of incentive mechanisms to foster the development of innovation ecosystems in SES*





5. Strengthening support to RD&D&I

Incentive mechanisms available in Brazil and the supported stages of innovation process

Incentive mechanisms available	Basic and applied research	Development	Demonstration	Commercialization
Research support (CNPq, FAPs)				
Cooperative projects (Embrappii, Conect Finep, Funtec BNDES, FAPs)				
Tax incentives ("Lei do Bem")				
Subvention Finep				
Preferential Loans BNDES and Finep				
Variable Income Investment				
R&D clauses (ANEEL and ANP)				



5. Strengthening support to RD&D&I

5.1. Adaptation and reactivation of mechanisms

5.2. Long-term R&D programs: strategic areas

5.3. Demonstrative programs

5.4. Test facilities and test platforms

5.5. Stimulate technology commercialization



5. Strengthening support to RD&D&I

REACTIVATION AND ADAPTATION OF PROGRAMS

Long-term RD&D Program

+ 5y of duration for
strategic SES

Demonstrative Programs

New dedicated
Institution or
department

Testing

Public RD&D infra
Testbeds
Living Labs

SUPPORTING AND APPROACHING COMMERCIALIZATION



THANK YOU!!

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