

Opportunities and Challenges for the Bioeconomy in Latin America

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Bioeconomy in a global context

Young - Field of policy relatively young, very little evidence of what works

Drivers – technological change and climate change (future without fossil fuels)

Tech convergence – solutions at the intersection of digital-bio-nano

Leaders – Leading bioeconomy countries such as US, Germany, China and EU:

- Heavy and sustained investments in science and technology
- Working to develop the new generation of technologies
- Emphasis in synthetic biology, biochemicals and carbon sequestration

Top players – Brazil and Argentina are also big players in this sector, mostly driven by its agriculture sector

Opportunities in Latin America

HAVE

Biomass (volume)

Biodiversity (value)

Shared biomes

NEED

> technology

> science

> collaboration

Challenges for the Latin America

Emerging biotechnologies are evolving fast, much faster than policy and regulation.

Bioeconomy is a cross-cutting theme. Inter-institutional governance is key.

Weak connection between science (researchers) and markets (entrepreneurs): poor technology/knowledge transfer.

Need to work at different levels: bio-based infrastructures are local, regulation is nation-based, R&D tends to be international, and biomass trade is global.

Need to rethink decision making processes for responsible, safe and ethical use of emerging biotechnologies, considering genetic, ecological and human values.

Bioeconomy Strategy, what does it take?

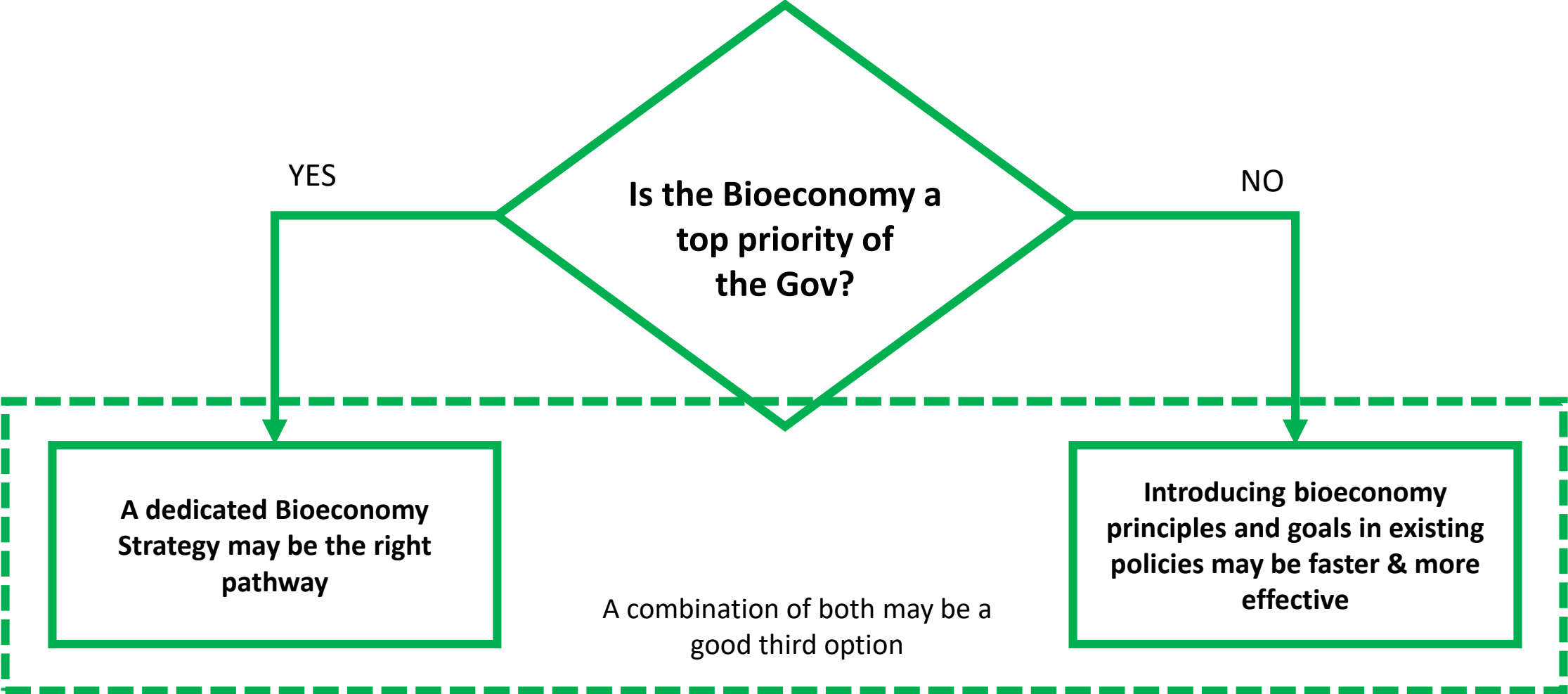
Classical behavior for policy making in most governments (globally):

1. A Government decides to develop a policy or strategy
2. A strategy is designed and approved
3. An action plan for the implementation is developed
4. Budget is allocated for the execution of the action plan
5. Action plan gets executed

Tasks 1 to 5 may take from 18 months to 4 years

A dedicated Bioeconomy Strategy may only be effective if it can move fast.

1. Options for a Bioeconomy Strategy



2. Execute, Execute, Execute

You don't need to wait (AND CAN'T WAIT) to have a full-fledged bioeconomy strategy to start executing actions towards the bioeconomy.

Several actions can be implemented while a bioeconomy strategy is being developed, even at pilot level, in order to create learning and demonstration effect for stakeholders and beneficiaries, and pave the way for the execution of the strategy.

3. Some priorities

- Talent development for the bioeconomy, fostering the skill mix for technological convergence of digital-bio-nano.
- Investments in R&D and technology transfer from labs to markets
- Empower the next generation of entrepreneurs: they are building the products and services that will power the bioeconomy. Here, the mix of skills is science with business
- Moving towards the bioeconomy requires an active role of society. Communication is critical in making the case for the bioeconomy.