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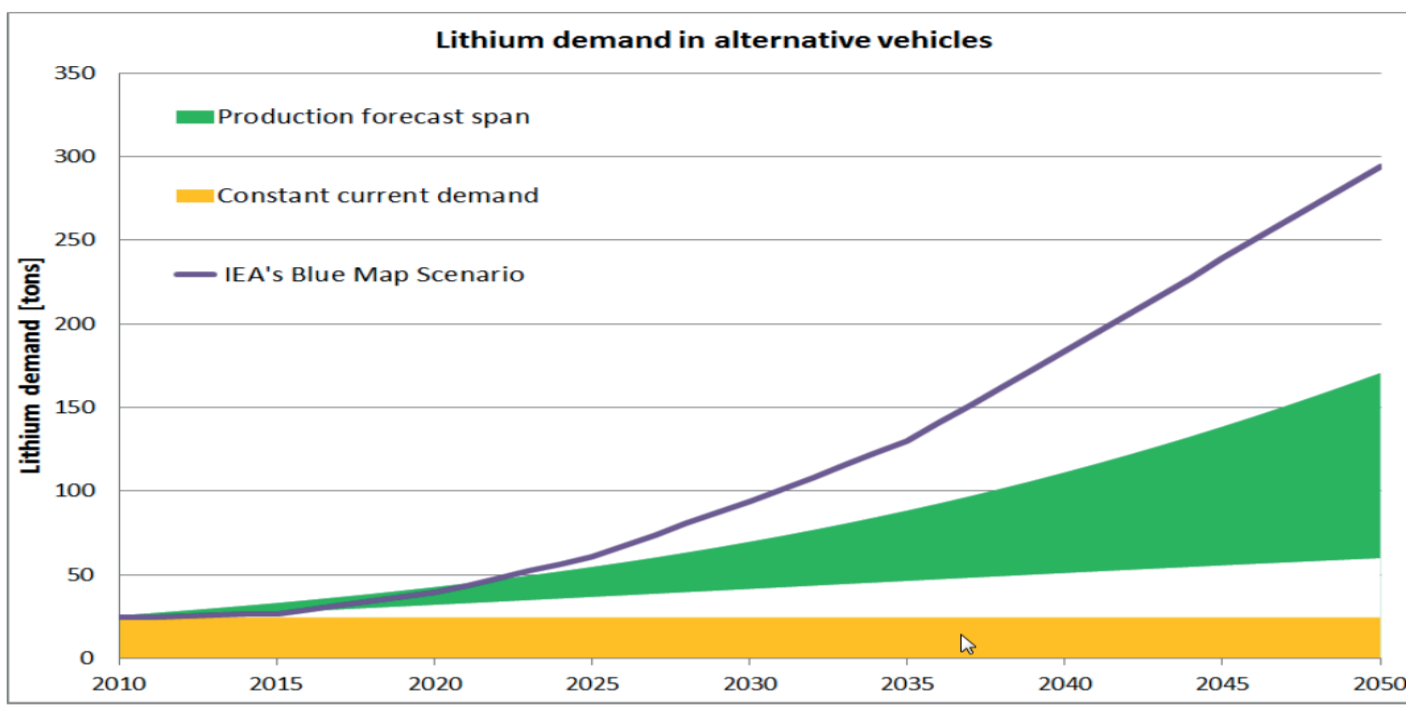
LITHIUM: A KEY FACTOR IN RESOURCE - TRANSITION NEXUS

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INTRO

* **Energy transition** means the use of intermittent energy and induce **growth of lithium production destined to lithium-ion batteries**

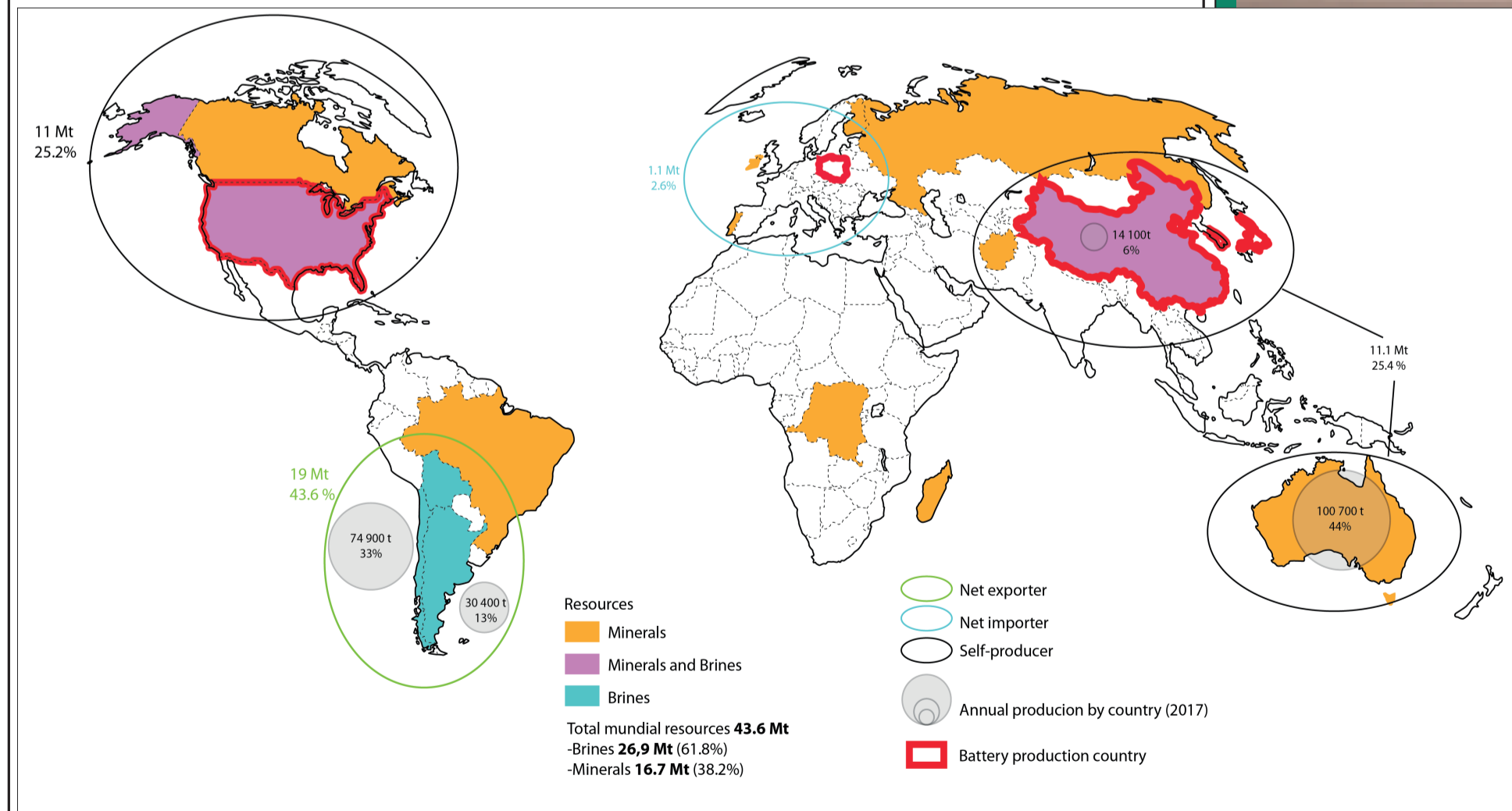


The total lithium demand of a constant current lithium demand combined with growth of electric vehicles according to IEA's blue map scenario (Vikström et al., 2013)

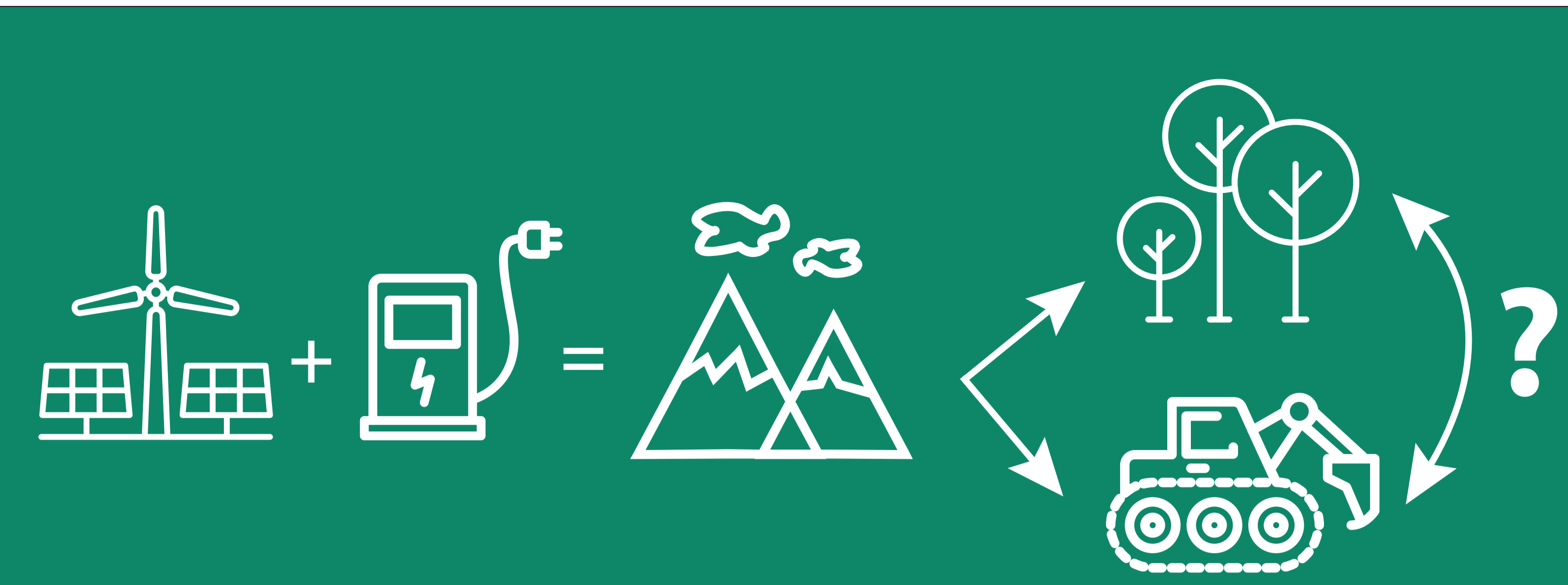
* Energy transition policies intent to **mitigate the effects of global change and preserve vulnerable mountains territories**

* **Goals and impacts differ** between global North and South
- **In global North** development of lithium based devices (electric vehicles, solar energy storage, etc.) as an opportunity for «green» economy
- **In global South** energy transition is more an opportunity to deliver some cheap electricity to disconnected mountains territories

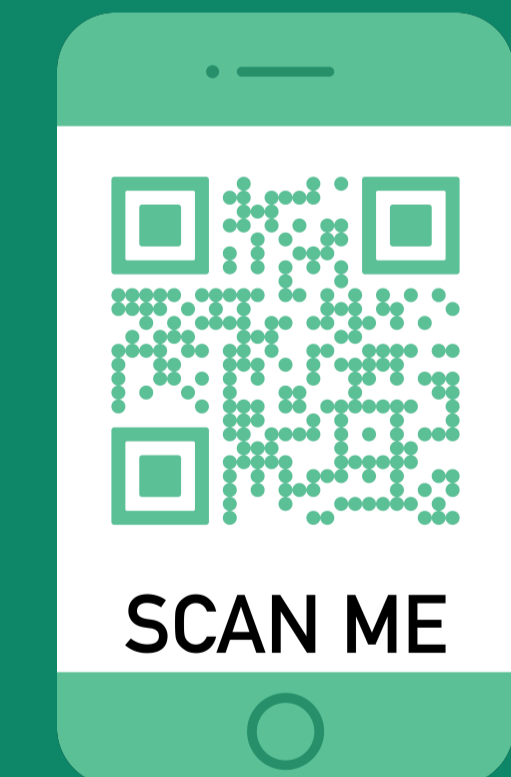
* **Spatial concentration** of the extractive and battery production processes gathered in different poles



Map of resource availability and production. Adapted from Grosjean and al., 2012



The desire to **preserve the environment** and the **idealised view of mountains** in the **global North** induces **extractive impacts**, “**denaturing**” of **indigenous landscapes** and possible **irreversible environmental damage**, in the mountain territories of the **South** where metals needed for new energy technologies are mostly mined



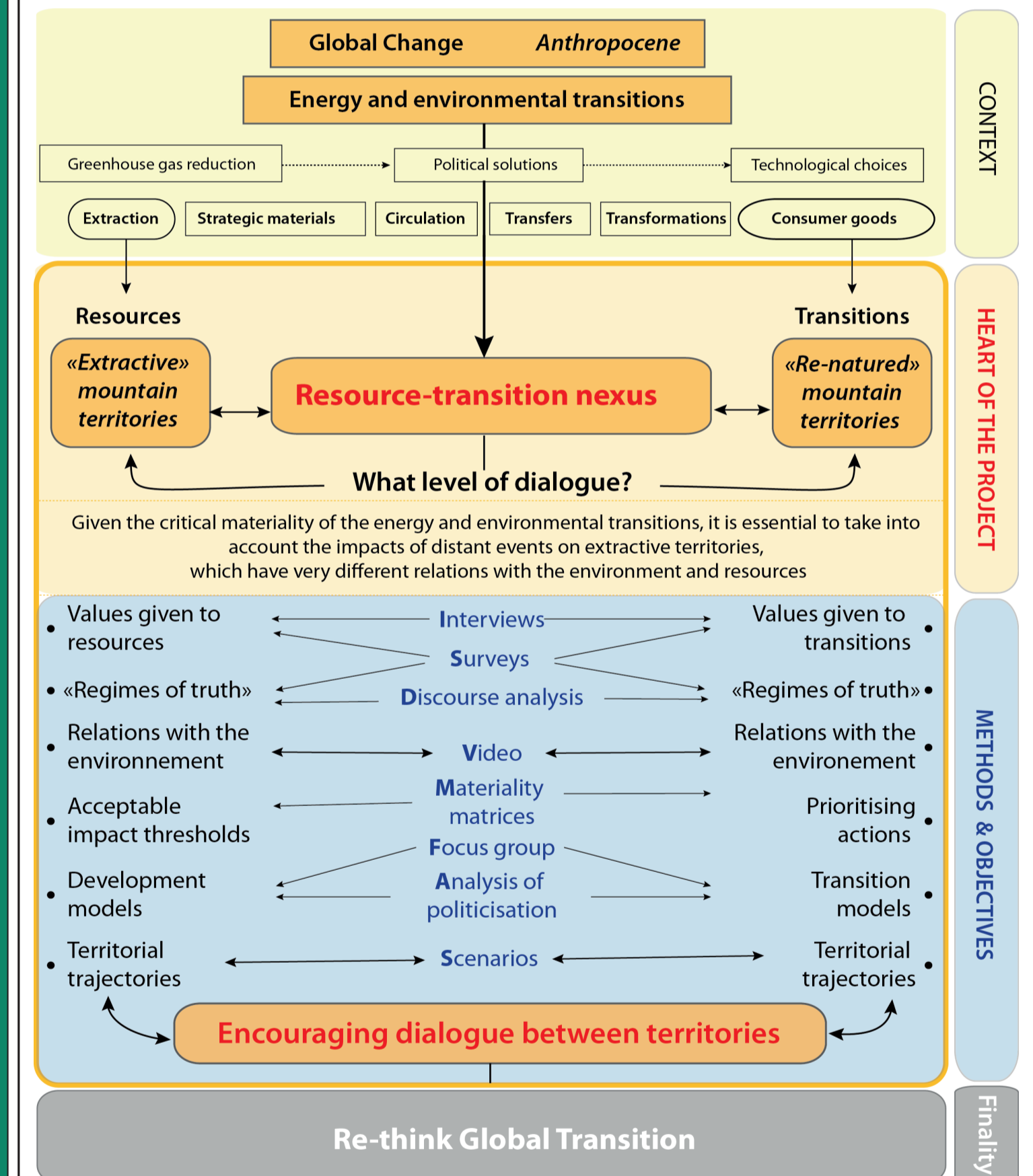
RESULTS

* Results indicate different perceptions of the lithium resource :
- mineral of the future, territorial development
- economic opportunity, commodity

Country	Chile	Argentina	Bolivia	Main extractive stakeholders
Extractive model	Blue	Green	Yellow	private (blue), public-private partnership (green), public (yellow)
Sense of evolution	Red arrow pointing left	Red arrow pointing left	Red arrow pointing left	Red arrow = sense of evolution
Type of regulation	Horizontal lines	Vertical lines	Horizontal lines	Regulated by: central-state (horizontal), subnational (provinces) (vertical)
Synthesis	Blue and green bars	Green and yellow bars	Yellow and green bars	

DISCUSSION

* The energy transition, which, beyond its justification as a vital part of the response to global change, reveals enormous contrasts between the logics operating in raw material-extraction territories and territories transitioning toward new ways of producing energy



- Relocalisation of Li-ion batteries chain productions in the extractive territories?
- Developing the extractive processes in Global North rich lithium territories?

* Behaviour-based regulations rather than technological choices (without another extractive pattern in Global South countries to mitigate industrial impacts?)

METHODS

* With social science methods (direct and semi-direct interviews) we analyse the public policies and the exploitation processes of the three main salt-lake brines (Bolivia, Argentina, Chile)

* Mapping