PARADOXAL ECOLOGICAL TRANSITION: LITHIUM EXPLOTATION FOR RENEWABLE ENERGY

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INTRO

* **Energy transition** means the use of renewable energy, which intermitent production and the electrification of energy services induce the **growth of lithium production destinated 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 polices 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 electricity to deconected mountains territories as well as mineral ressources for new energy industries

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

Map of resource avalaibility and production. Adaped from Grosjean and al., 2012

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

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

SCAN ME

RESULTS

* Results indicate different perceptions of the lithium resource :
  - mineral industry for territorial development
  - commodity for economic growth

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 lithium territories?

* Energy transition, as a technological choice, must also be based on changes in behaviours and political regulations for local and global sustainability

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