

(No) solution to the climate crisis

Group work on technical solutions to the climate crisis

E-mobility and lithium

As the second largest emitter of greenhouse gases, transportation is a driving factor in the global climate crisis. In Germany, car traffic accounts for 27.14% of total energy consumption. E-cars are often discussed as a climate-friendly alternative in the area of mobility. Electric cars (E-cars) can be charged with electricity that is stored in batteries. The metal lithium is used to manufacture the batteries. Lithium is a limited natural resource, so it cannot be mined sustainably as it will be used up at some point.

The largest lithium deposits in the world are found in underground salt lakes in Bolivia, Argentina and Chile. There, the salt water is pumped out of the ground and into basins where it evaporates to extract the lithium from the concentrated brine.

In 2019, Germany imported around 3,500 tons of lithium from Chile, where it is extracted in the Salar de Atacama. Global demand is expected to increase many times over in the coming years.

Water and mining:

Scan the QR code or click on the link to learn about the consequences of lithium mining in the Atacama Desert in Chile:

<https://vimeo.com/557801430>



The people in the video are experts who live in the community of San Pedro de Atacama:

- Sonia Ramos is a healer from the indigenous Licanantay communities. She describes herself as a defender of the desert.
- Jorge Muñoz Coca is an indigenous leader and, as a member of the "Comunidad atacameña de Solcor", is actively involved in socio-ecological issues. Solcor is an "ayllu". These are indigenous political communities.
- Jorge Cruz is a farmer and former chairman of the Camar neighborhood initiative.
- Sergio Cubillos was chairman of the indigenous association "Asociación indígena Consejo Pueblos Atacameños". He lives between Peine and Calama and has also run for various political offices, such as mayor, but has not won these in elections.
- Karen Luza is a member of the indigenous association of the San Pedro de Atacama river. She works in eco-tourism.

Eco-colonialism:

Many countries in the global South are dependent on the export of raw materials. This is a dynamic that has developed from colonialism, in which European colonisers used their



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colonies to obtain labor and raw materials. These raw materials enabled Europe to industrialize and establish power dynamics that still exist today. As in colonial times, the raw materials are mined in the global South and processed in the global North, e.g. into lithium batteries. However, much more money can be earned from production than from the export of raw materials. And so most of the money remains in the European industry, where production takes place.

Scan this QR code or click on the link and watch the video on eco-colonialism:
<https://vimeo.com/557802513>

The people in the video are:

- Ramón M. Balcázar is the coordinator of the "Observatorio Plurinacional de los Salares Andinos". The plurinational collective works to protect the Andean salt lakes in Chile, Argentina and Bolivia. He lives in San Pedro de Atacama in Chile and Ciudad de México in Mexico.
- Andrea Vásquez lives in Calama, a city in the north of Chile. Since 2012, she has been a member of the "Coordinadora por la defensa del Río Loa y Madre Tierra Tierra P'ata Hoiri", an organization that fights together with indigenous women, local residents, housewives, professionals and workers against the socio-ecological impacts of mining. They do this out of the conviction that nature has rights and that water must be defended as a source of life in a desert region.



Reflection:

After you have watched the videos, you can exchange ideas and reflect together on what you have seen. Here are a few key questions to guide you:

- To what extent does the expansion of e-mobility contribute to global (in)justice?
- What (other) challenges do you see with e-mobility as a solution to the climate crisis?
- The term "eco-colonialism" is used in a video. What does it describe?
- What are the people in the videos calling for instead?
- What contribution can e-mobility make to a more sustainable, fairer society? What would it take?

Sources:



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- The method is inspired by the "[Mobilitäts-Captcha: Globale Perspektiven auf E-Autos und Autonomes fahren](#)" method from the F_3 Collective. Their method is particularly suitable as an online and/or self-learning method and also has a method description for face-to-face seminars. The method is published under the license: CC BY-SA 4.0 Deed. You can find it here: <https://www.digital-global.net/uebung/e-autos/>
- The videos are from the Formando Rutas project and published under the license: CC BY 4.0.
- Emissions from transportation.
[https://www.umweltbundesamt.de/daten/verkehr/emissionen-des-verkehrs#strassenguterverkehr-](https://www.umweltbundesamt.de/daten/verkehr/emissionen-des-verkehrs#strassenguterverkehr)
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- Lithium: How sustainable are mining and sales? <https://www.dw.com/de/lithium-das-wei%C3%9Fe-gold-wie-nachhaltig-sind-abbau-und-verkauf/a-64664350>
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