

Circularity, Entropy, Ecological Conflicts, LFFU

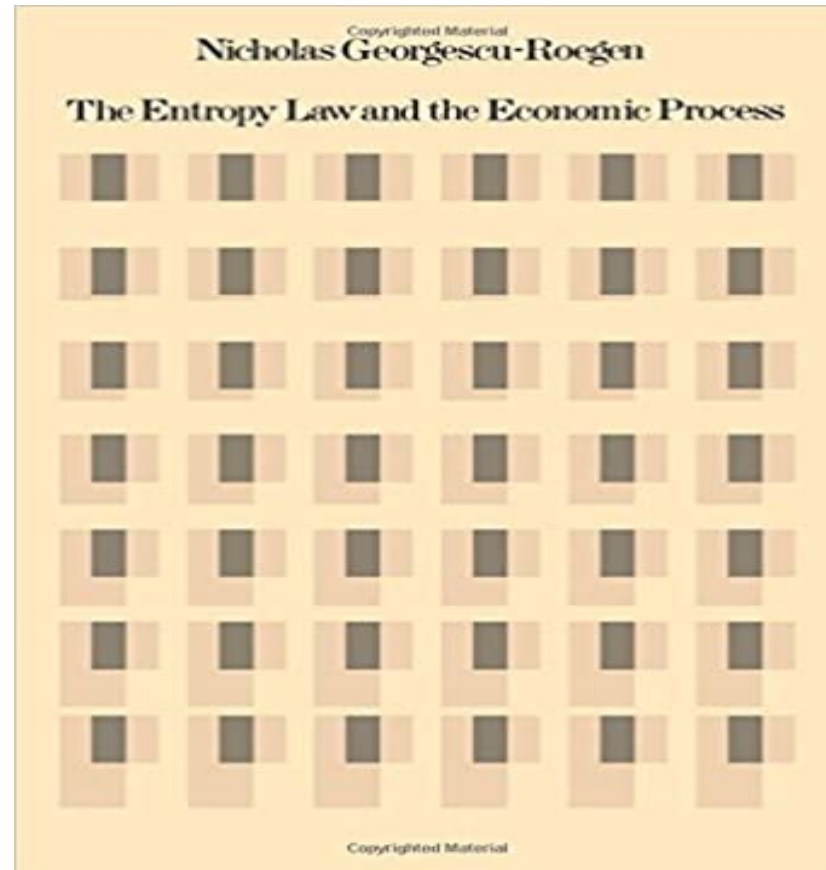
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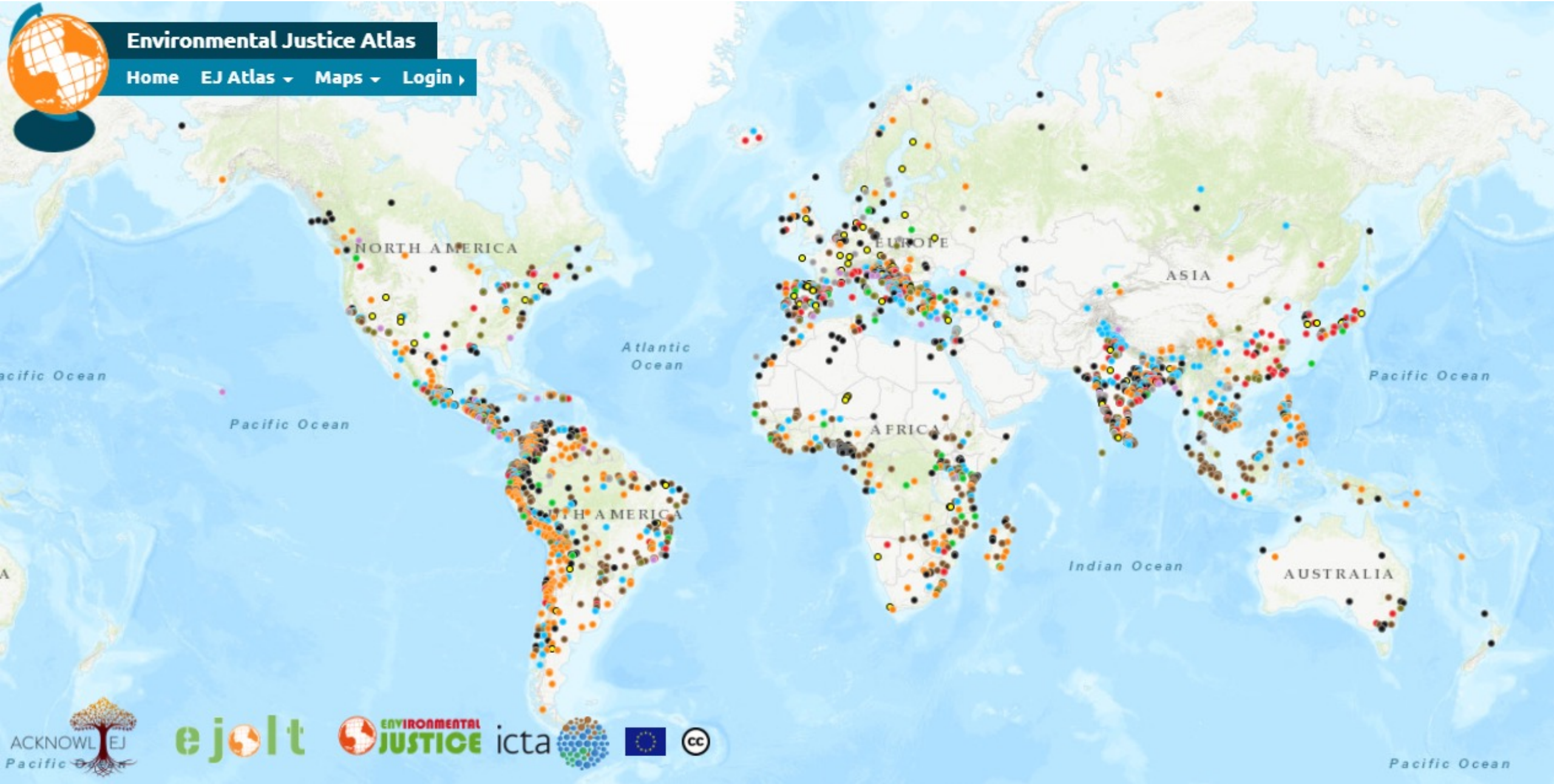
30 April 2021



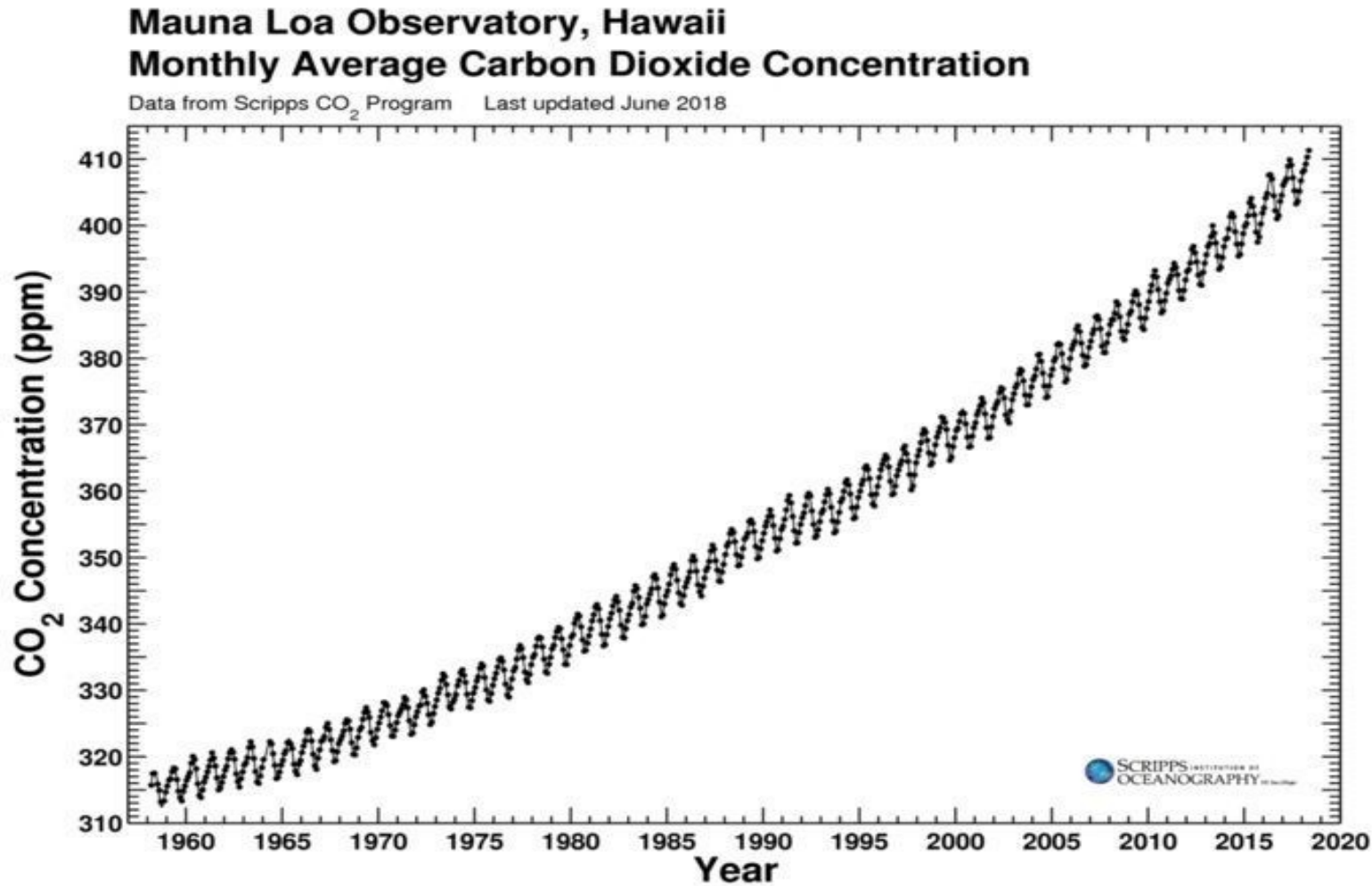
The industrial economy is not circular –it is entropic (NGR, 1971). Hence many ecological conflicts at the frontiers of commodity extraction and waste disposal.



The EJAtlas (www.ejatlasing.org) 3450 cases by May, 2021.



The Keeling curve, reaching 420 ppm



The Rodney & Otamatea Times

WAITEMATA & KAIPARA GAZETTE.

PRICE—10s per annum in advance

WARKWORTH, WEDNESDAY, AUGUST 14, 1912.

3d. per Copy.

Science Notes and News.

COAL CONSUMPTION AFFECT- ING CLIMATE.

The furnaces of the world are now burning about 2,000,000,000 tons of coal a year. When this is burned, uniting with oxygen, it adds about 7,000,000,000 tons of carbon dioxide to the atmosphere yearly. This tends to make the air a more effective blanket for the earth and to raise its temperature. The effect may be considerable in a few centuries.



Source: <https://www.thenewsminute.com/article/fridays-future-was-govt-radar-long-disha-ravis-arrest-inside-view-143502>



Source: Against coal mining in South Cotabato, Philippines.

<https://ejatlas.org/conflict/coal-mining-in-barangay-ned-south-cotabato-philippines>



**JULY 1
IS THE
DAY OF
CLIMATE
JUSTICE
MARTYRS.**
#ClimateJusticeNow

- Source: Climate Justice movement against coal in the Philippines.
- The murder of Gloria Capitan. <https://ejatlas.org/conflict/coal-mining-leading-to-the-killing-of-gloria-capitan>



国は石炭火力の
新設を止めて!

Japanese gov. STOP increasing Coal-Fired power plant!

横須賀石炭火力行政訴訟原告団・弁護団
石炭火力を考える東京湾の会



Source: Kiko network. <https://ejatlas.org/conflict/soga-coal-poer-chiba-japan>



<https://ejatlas.org/conflict/chamalapura-thermal-power-plant-karnataka-india>



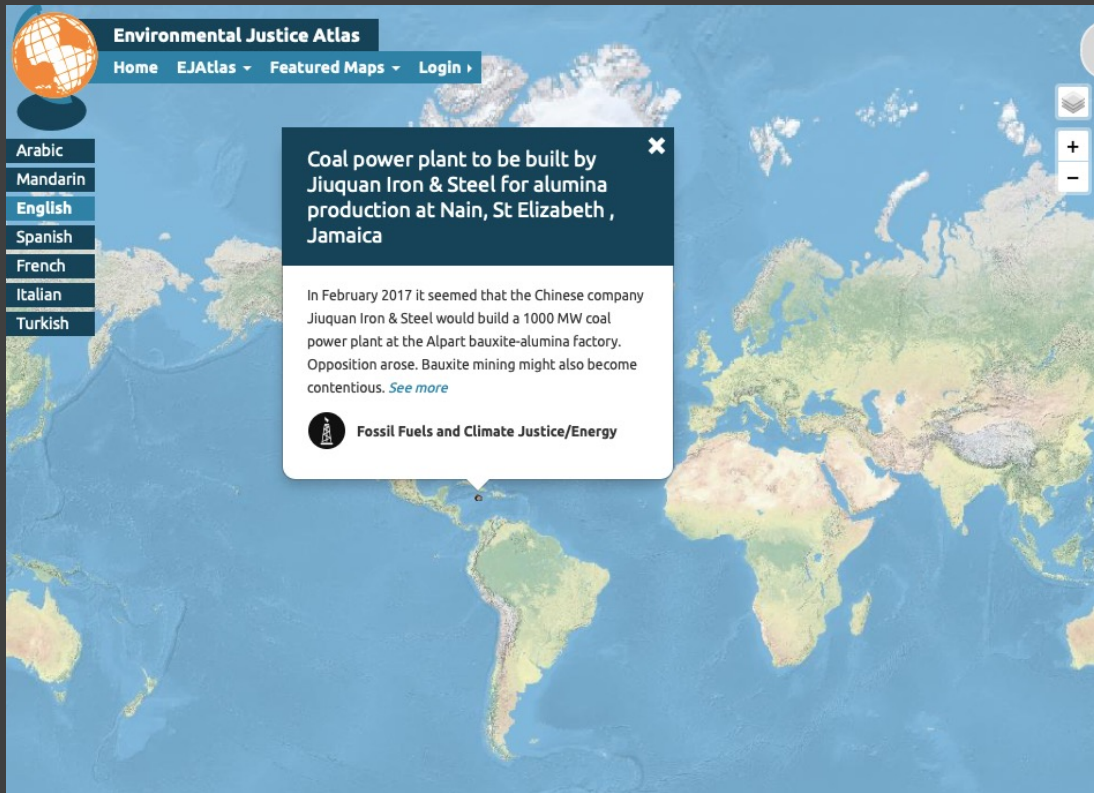
Fikile Ntshangase. <https://ejatlas.org/conflict/tendele-coal-mine-somkhele-kwazulu-natal>



- Source: Keep the coal in the hole. 5 Nov. 2020. (Photo Rob Symons). <https://www.iol.co.za/the-star/opinion-analysis/mam-ntshangase-murder-lives-of-human-rights-defenders-whistle-blowers-must-be-protected-8ee4ef49-b066-4471-afaa-bd1d7442e8ce>.

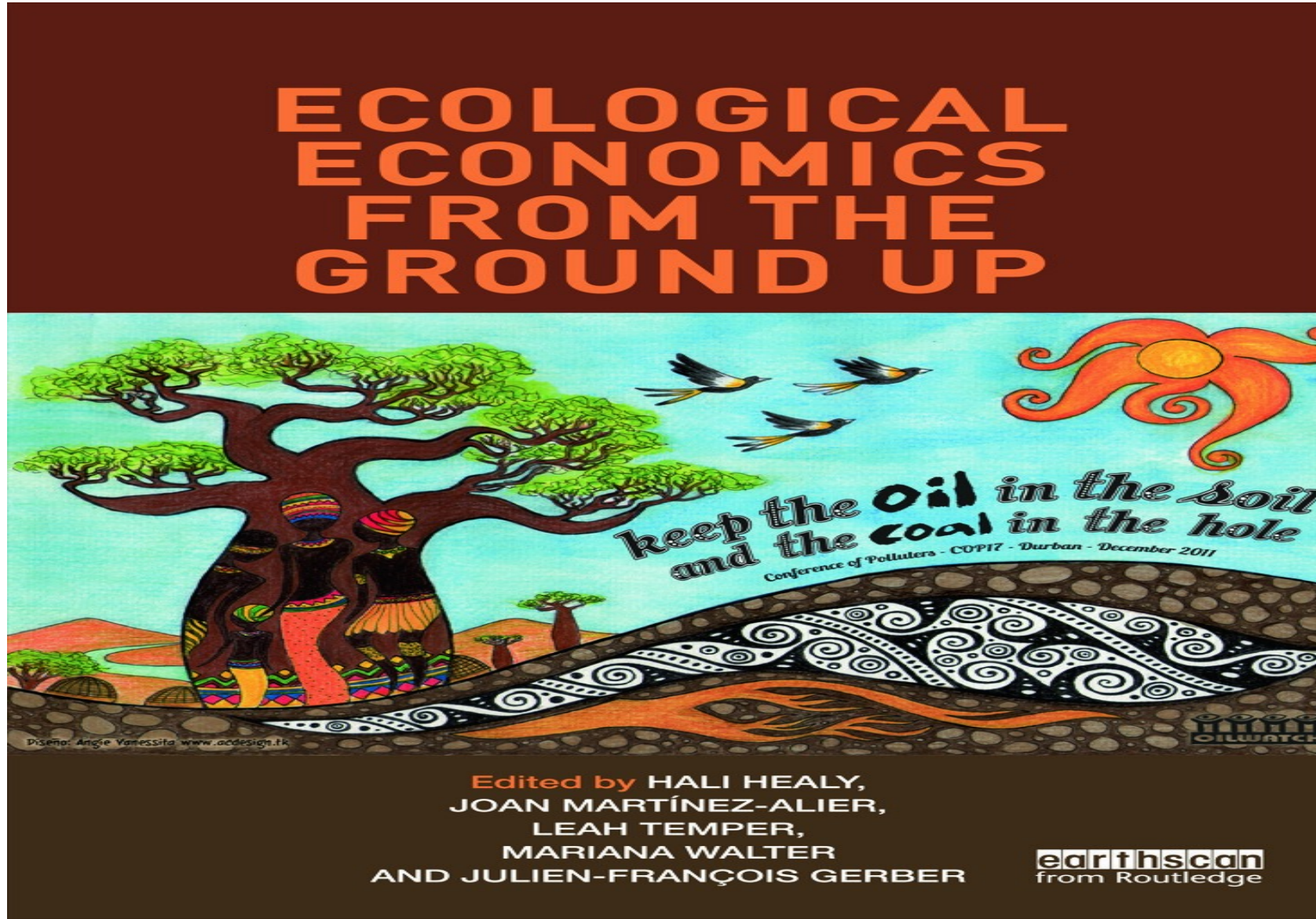


Source: LFFU in Mencherep, Kemerovo oblast. <https://ejatlas.org/conflict/mencherep-residents-successfully-resisting-a-new-open-coal-pit-threatening-their-village>



- Source: Complaints against CFPP and alumina smelter.
<https://ejatlas.org/conflict/coal-fired-plant-to-be-built-by-chinese-company-jiuquan-iron-steel-at-nain-st-elizabeth-jamaica>

“Keep the oil in the soil, keep the coal in the hole”.
A book published in 2013 from the CEECEC project





Source: Mapuche demonstration. <https://ejatlas.org/conflict/resistance-to-chevron-ypf-fracking>



- Source: Not to fracking in Neuquén. <https://ejatlas.org/conflict/loma-de-la-lata-neuquen-argentina>



Source: Oil extraction platform in Estación Fernández Oro. <https://ejatlas.org/conflict/allen-y-la-extraccion-de-gas-por-fractura-hidraulica>



Source: Protest action at Lofoten islands. <https://ejatlas.org/conflict/oil-drilling-lofoten-norway>

The paths of proposed oil pipelines



DAPL and Keystone pipelines. More information about these conflicts at <https://ejatlas.org/conflict/210000-gallon-oil-spill-from-keystone-pipeline-in-south-dakota>



The DAPL. <https://ejatlas.org/conflict/dakota-access-pipeline>



Lincoln, Nebraska. Give Keystone XL the boot, march on 6 August 2017.

<https://ejatlas.org/conflict/keystone-xl-in-nebraska>



LFFU in Canada. Rally on 17 November 2014. <https://ejatlas.org/conflict/the-kinder-morgan-trans-mountain-pipeline-expansion-project-in-british-columbia-canada>



Against the TAP in Puglia <https://ejatlas.org/conflict/trans-adriatic-pipeline-in-puglia-italy>

Kavango, Botswana-Namibia

<https://ejatlas.org/conflict/kavango-oil-botswana-namibia>

Plans for oil drilling in Kavango region in Namibia and north-west Botswana near the Okavango Delta where Canadian company ReconAfrica holds explorations licences covering 3 million ha. Estimates from 12,000 million to 120,000 million barrels of oil.





Afungi airport and LNG park. Palma, Cabo Delgado, Mozambique. Source: Anadarko. Stay Grounded. <https://ejatlas.org/conflict/afungi-lng-construction-site>

Why so many LFFU protests (leave oil in the soil,
leave coal in the hole, leave fossil fuels
underground)?

Are all these protests geared to avoid climate
change?

Protests take place at the extraction frontiers and the waste disposal frontiers. The industrial economy is NOT circular, it is entropic. Of the 100 Gt per year of materials (including energy carriers) entering now the world economy every year, less than 10 Gt are recycled. (W. Haas et al 2015, 2020).

A rough estimate: the world economy produces around 40 billion tons of CO₂ per year (35 from the fossil fuels, 5 from land use changes). Very unequal distribution per capita.
But we must reduce by half.

The succesful LFFU, Blockadia, Yasunization/Ogonization cases recorded in the EJAtlas amount perhaps to 5 billion tons (per year).

EJOLT, EnvJustice and EJAtlas main work on Leaving Fossil Fuels Underground (LFFU)

www.envjustice.org

- 1) Towards a Post-oil Civilization. Yasunization and Other Initiatives to Leave Fossil Fuels in the Soil. By Leah Temper et al , EJOLT report n. 6, 2013: <http://www.ejolt.org/2013/05/towards-a-post-oil-civilization-yasunization-and-other-initiatives-to-leave-fossil-fuels-in-the-soil/>
- 2) Featured Blockadia Map in the EJAtlas (2018), co-ordinated by Alice Owen and Daria Rivin, Student Researchers at Lund University/ICTA-UAB, and Ende Gelände activists, and Andrea Cardoso of Universidad del Magdalena, Colombia, Brototi Roy and Daniela del Bene, PhD candidates at the Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona. Featured Blockadia map: <https://ejatlas.org/featured/blockadia>.
- 3) Blockadia: grassroots movements against fossil fuels and for climate justice (in Spanish). J. Martínez-Alier; Alice Owen; Brototi Roy; Daniela Del Bene, Daria Rivin. Anuari CIDOB. Barcelona, 2018: <https://www.raco.cat/index.php/AnuarioCIDOB/article/view/348692>
- 4) Movements shaping climate futures: A systematic mapping of protests against fossil fuel and low-carbon energy projects. By Leah Temper, Sofia Avila, Daniela Del Bene, Jen Gobby, N. Kosoy, Ph. Le Billon, J. Martinez-Alier, Patricia Perkins, Brototi Roy, Arnim Scheidel and Mariana Walter.. Environmental Research Letters,15 (12). 2020: <https://iopscience.iop.org/article/10.1088/1748-9326/abc197/meta>
- 5) Koyla Kahini: The Political Ecology of Coal in India. By Brototi Roy. Doctoral thesis, ICTA UAB, 2021: <https://www.uab.cat/web/sala-de-premsa-icta-uab/detall-activitat/defensa-de-tesi-de-brototi-roy-1345813172616.html?detid=1345840084873>
- 6) https://www.ecologiapolitica.info/novaweb2/wp-content/uploads/2021/05/Cynthia-Isenhour.JMA_revised-12May-2021.pdf. Circularity, entropy, ecological conflicts, LFFU. By J. Martinez-Alier.

Thank you

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