

# CARBON LEAKAGE

## F R A U D

“Forests, footprints, industry pollution, credits, emissions, animate and non animate alike are measured and valued in terms of carbon, and their potential to sequester it. In the wake of climate catastrophe, carbon as currency becomes a tool that capitalises in the present upon the uncertainty of the future.”

Strata of fossil fuel, or subterranean forests to use Rolf P. Sieferle’s term from his manuscript linking the availability of resources to social formations,<sup>1</sup> are a contentious treasure within the contemporary nomenclature of *carbon*, of which coal is a derivation. Carbon has become a unit of value and measurement. Forests, footprints, industry pollution, credits, emissions, animate and non-animate alike are measured and valued in terms of carbon, and their potential to sequester it. In the wake of climate catastrophe, carbon as currency becomes a tool that capitalises in the present upon the uncertainty of the future.<sup>2</sup> Following this logic, carbon has been introduced as commodity on the futures market, to be traded, exchanged, and subjected to market speculation.

Framed in terms of debt, carbon credits (to alleviate the ‘evils’ carbon footprint) are the *indulgentia* of present times. The carbon market is projected to become the world’s largest commodity market by 2020. In the early days of discussions around the financialisation of nature leading up to the Kyoto Protocol, the idea of valuation as a means of protecting ‘nature’ gained currency.<sup>3</sup> Nowadays, the failed protocol has shifted to the Paris Agreement, which is also based on emission trading and creative carbon accounting. The following concentrates on the dubious and lucrative phenomenon of carbon leakage that stems from the attempt to universalise emission mitigation practices. Leakage emerges through the logic of capital’s contrived frictionless flows which rely upon increasingly compartmentalised and individuated techno-systems such as borders and container ships. The definition of containment which scaffolds contemporary economic and political structures necessarily opens up to its own leakage.<sup>4</sup> Containment and speculation are intimately linked to North American grain industrialism.<sup>5</sup> In the nineteenth-century American farmers sent trainloads of grain to Chicago to be stored and sold from the city’s grain elevators. The elevator receipts, a document that functions as grain acknowledgment of receipt, afforded the circulation and exchange of grain not as a physical good but as an abstract

claim. Thus the contemporary futures trade was erected upon the steam powered grain elevator, the grading system, and the elevator ticket.<sup>6</sup> These technologies afforded present notions of value, containment and leakage.

A simplified account of emission trading, the system from which the breach is feared, is based on the exchange of carbon credits. Participating countries to the agreement are essentially given a limited amount of credits to distribute amongst their polluting industries. One carbon credit allows the emission of one tonne of carbon dioxide. The amount distributed should ensure a curbed increase in global temperature. This is how it operates in theory, however the implementation has been somewhat slippery. Carbon leakage is posited as a negative externality of climate change policies,<sup>7</sup> a phenomenon projected from the imagined consequence of production processes moving to countries with less stringent measures. This displacement would lead to rising global greenhouse gas emissions rather than its desired opposite. As a result, manufacturing industries that have been deemed at risk of carbon leakage receive an amount of emission allocations for free. This may be understood under the umbrella of ‘allowances for economic growth’, the actual *sub-face* of the green economy.<sup>8</sup> One of the consequences of market speculation driving the cost of carbon credits is that industrial sectors are receiving more free pollution permits than the amount of CO<sub>2</sub> they emit, which they sell, incurring what is called windfall profits.<sup>9</sup> These profits are to the order of billions on a yearly basis. *Institutionalised fraud?*

We might be under the spell of the post-fuel, post-fire bio-economy, where a tree is the ultimate siphon between the chimney of a sweatshop and the IPCC (Intergovernmental Panel in Climate Change) database; or that the sleek design of the wooden Paimio chair can function as an apparatus for carbon storage, heralding a new trend of thick, voluminous ‘sink design’. Maximise your carbon storage at a discount rate!

— FRAUD (Audrey Samson & Francisco Gallardo) is an artist-duo that has been developing a genealogy of carbon derivatives, most recently with ‘Carbon Rifts’, a process of salvaging wrecks to unearth histories of the North Sea, colonialism, whaling, pine tar, shipbuilding, deforestation, carbon circulation and emission trading. These art-led enquiries have been generously supported by: the Canada Art Council, the London Community Foundation, the Cockayne – Grants for the Arts, the British Council, the HIAP and the Somerset House Studios.

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## SOURCES

**Richard Burton, p.8** Transcript from an excerpt of The Dick Cavett Show, July 1980. Director: Richard Romagnola; Production: Robin Breed; Segment Production: Lynda Sheldo; Daphne Productions Inc.

**Andreas Malm, p.12** Malm, Andreas. Fossil Capital: The Rise of Steam Power and the Roots of Global Warming, pp.17-19, (London: Verso, 2016). Non-exclusive UK rights to reproduce the above material are granted without charges.

**FRAUD, p.18** Text has been written specifically for the purpose of this publication. © 2018 by FRAUD.

- 1 See Rolf Peter Sieferle (2001). The subterranean forest: energy systems and the industrial revolution. Cambridge: White Horse Press.
- 2 See Elena Esposito (2012) The Mysteries of Money. Inaesthetics 3(4). Available at: [inaesthetics.org/index.php/main/issue/3/4#four-ref](http://inaesthetics.org/index.php/main/issue/3/4#four-ref)
- 3 This type of economic ecological thinking has precedent, namely in the sulphur trade, hailed for allegedly halting acid rain in the US.
- 4 See Wendy Hui Kyong Chun, Sarah Friedland (2015). Habits of leaking: Of sluts and network cards. differences, 26(2), pp.1-28.
- 5 Reyner Banham (1986). A concrete Atlantis: US industrial building and European modern architecture, 1900-1925. Cambridge, MA, and London: MIT Press.
- 6 William Cronon (1991). Nature's metropolis: Chicago and the Great West. New York, NY, and London: WW Norton & Company.
- 7 See OECD (2006). The political economy of environmentally related taxes. Paris: OECD.
- 8 This term is used in the spirit of Frieder Nake's theorisation of sur-face/sub-face.
- 9 See [carbonmarketwatch.org](http://carbonmarketwatch.org)

**Wayne Evans, p.22** Transcript from an interview held in May 2018, Gwaun-Cae-Gurwen, South Wales. Interviewer: Jesper Eriksson; Interviewee: Wayne Evans; Sound technician: Shôta Sakami.

**Bård Harstad, p.28** Harstad, Bård. Pay countries to keep their fossil fuel in the ground, Financial Times, 04.08.2013. [www.ft.com/content/f9496782-e491-11e2-875b-00144feabdc0](http://www.ft.com/content/f9496782-e491-11e2-875b-00144feabdc0) (Accessed 15 August 2018).

**Rhian Kendall, p.38** Text has been written specifically for the purpose of this publication. © 2018 by Rhian Kendall. The following publications have informed this text and can provide more information for the interested reader:

- British Geological Survey (2010). Mineral Planning Factsheet: Coal. [www.bgs.ac.uk/downloads/start.cfm?id=1354](http://www.bgs.ac.uk/downloads/start.cfm?id=1354)
- Martin, E.A. 1901. The story of a piece of coal what it is, whence it comes, and whither it goes. London: George Newnes, Ltd. Southampton Street, Strand.

- Cleal, C.J. and Thomas, B.A. 1994. Plant Fossils of the British Coal Measures. Palaeontological Association Field Guides to Fossils: Number 6. The Palaeontological Association. London.
- Department for Business, Energy & Industrial Strategy (BEIS). 2018. Digest of United Kingdom Energy Statistics (DUKES). [www.gov.uk](http://www.gov.uk)
- Kendall, R.S., Brown, T., Heatherington, L. 2010. Mineral Profile: Coal. British Geological Survey. [www.mineralsUK.com/](http://www.mineralsUK.com/)
- Kendall. 2016. Carboniferous Fossil Plants. South Wales Geologists Association
- Thomas, B.A. and Cleal, B.A. 1993. The coal measure forests. Amgueddfa Cymru – National Museum Wales.
- World Coal Association. 2015. Coal Facts 2015. [www.worldcoal.org](http://www.worldcoal.org)

**Ian Morris, p.44** Morris, Ian. Foragers, Farmers, And Fossil Fuels: How Human Values Evolve (Princeton: Princeton University Press, 2015). Excerpted from Chapter 4; © 2015 by Ian Morris. Published by Princeton University Press and reprinted here by permission of the publisher.

- 1 Crosby 2006 is an excellent nontechnical introduction; Smil 1991 and 1994 provide more detail.
- 2 A.H.V. Smoth 1997; Mokyr 1990, pp.21-22
- 3 On the details of the English industrial revolution, Landes 1969 remains a classic, to be updated with Floud and McCloskey 1994; Wrigley 2000; Allen 2009; and Mokyr 2010.
- 4 Calculations from Morris 2013, pp. 63-65.
- 5 Frieden 2006 is particularly good on this.
- 6 Marx and Engels 1977 [1848], p. 224.
- 7 Ferguson 2003, p. 59. Belich 2009 gives a fine account of what he calls "the rise of the Anglo-World."

**Camilla Sundwall, p.50** Text has been written specifically for the purpose of this publication. © 2018 by Camilla Sundwall.

**Barry Lord, p.56** Lord, Barry. Art & Energy How Culture Changes. (Washington, DC: The AAM Press, 2014) © 2014 by Barry Lord, Reprinted with permission from The AAM Press.

- 1 In 1808 poet Robert Southey visited a Manchester factory where children started their 13-hour days at 5 a.m., followed by an evening shift of moure child laborers. "There is no idleness among us," the factory assured Southey (Hunt, 2009)
- 2 Max Weber and R.H. Tawney demonstrate how the work ethic arose in the 16th-century Protestant Reformation's emphasis on individual responsibility, and flourished under 19th-century capitalism (Tawney, 1926). A vernacular expression of this theology warns that "the devil makes work for idle hands."

**Aneurin Owen, p.62** Owen, Aneurin. The Blaenclydach Disaster, Unpublished, 1941. [www.welshcoalmines.co.uk](http://www.welshcoalmines.co.uk) (Accessed 9 August 2018)

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Jesper Eriksson is a designer and/or artist, interested in work related to the human, culture and material. He is interested in materials that has strong influences on our culture. He aims to create a contemporary narrative from existing historical, socio-economical or cultural context. His process combines both a hands on material experimental approach with an in-depth intellectual research. Swedish and Finnish, born and raised in Paris, he currently lives and works in London.

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