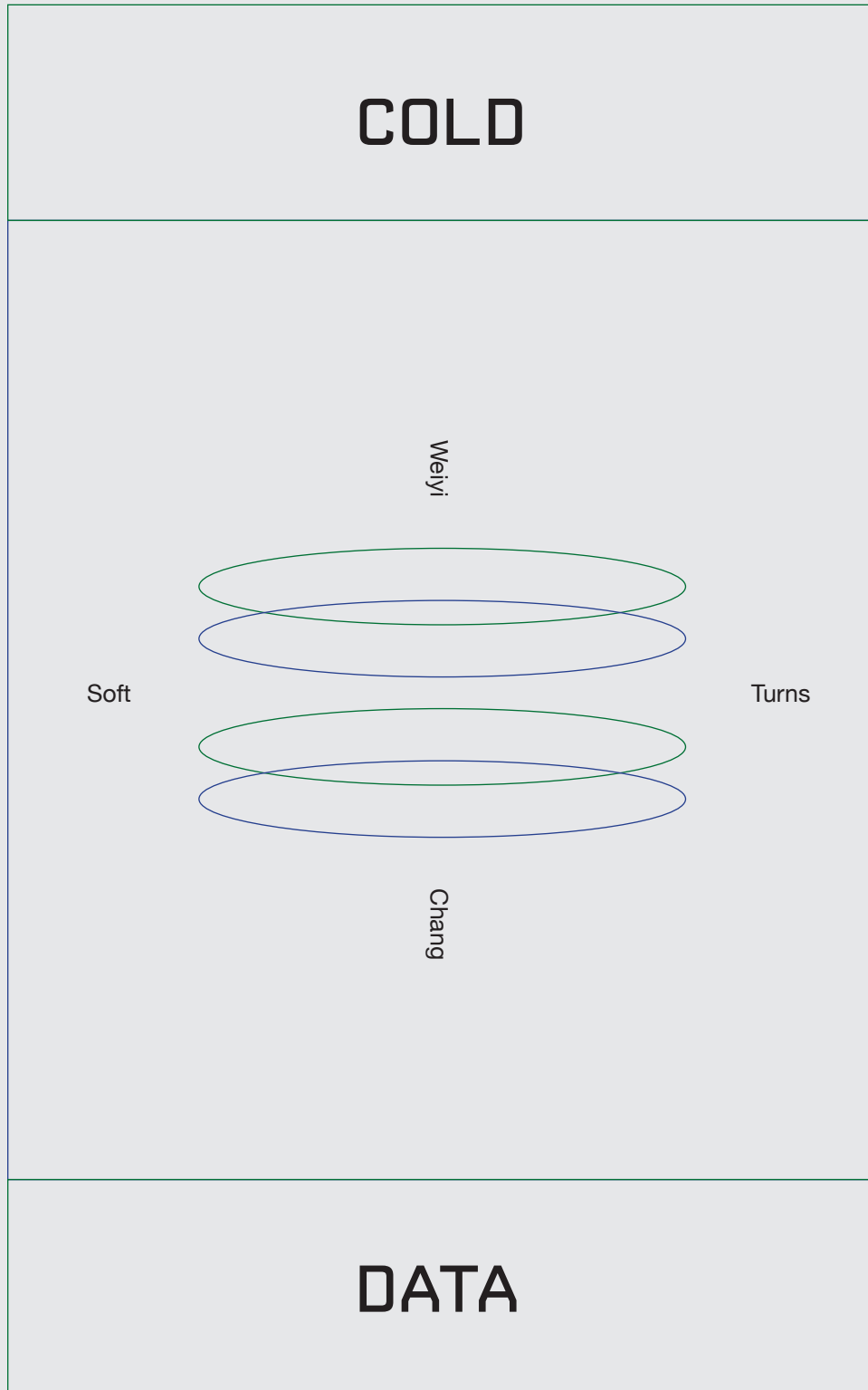




There is a data centre several blocks southeast of my home. It resembles any number of mixed-use buildings that have emerged in recent years in the surrounding neighbourhood: a mid-rise building, five storeys tall, its facade wrapped in brick-coloured slats set against a dark base, the mass floating atop recessed glass walls that run the length of its ground floor. Yet behind its nondescript facade, this building, known as TR2, facilitates the movement of billions of dollars everyday, providing real-time data transfer and storage services to the banks, stock exchanges and financial institutions that make up the heart of Canada's financial system just a few blocks west.¹

¹ "TR2 Toronto IBX® Data Center," *Equinix*, <https://www.equinix.com/data-centers/americas-co-location/canada-colocation/toronto-data-centers>

The building is one of three data centres operating in Toronto owned by the American multinational company Equinix.² Over 100 data centres exist in the Greater Toronto Area and more are planned, catalyzed by the global race for AI domination. Given the vast quantities of data and processing power required to feed and train AI tools, coupled

with new geopolitical concerns regarding data sovereignty and national security, controlling the infrastructure that enables AI has taken on a renewed urgency—and many are ready to cash in. In 2024, Alberta announced an AI Data Centre Strategy predicated on the province's abundance of natural resources.³ In Ontario, a new energy plan, couched in nationalistic pro-growth rhetoric, prioritizes electricity for data centres.⁴

Facilities like TR2 are nodes that connect to a global network, transmitting web traffic, facilitating cloud storage, enabling near-instantaneous processing speeds. All of this activity occurs in a tightly controlled semi-permeable system, a rigid

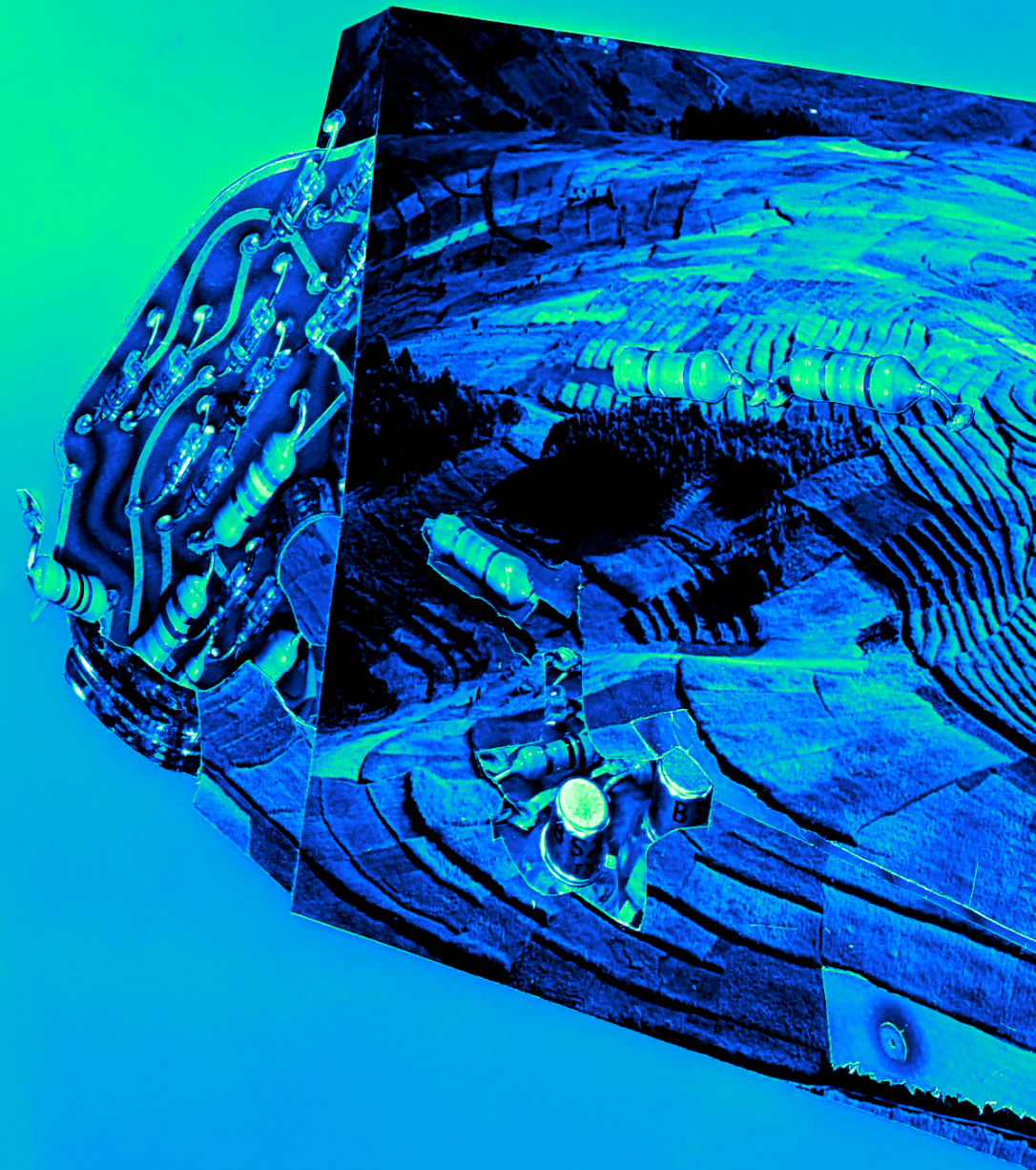
artificial environment consisting of back-up power supplies, climate control systems and stringent security measures incorporated directly into the architectural design.⁵ When one or more of these systems fail (as they did in 2011 at Facebook's first data centre in Oregon) unpredictable environmental

² James Bradshaw, "The data block," *The Globe and Mail*, March 6, 2025, <https://www.theglobeandmail.com/canada/article-inside-the-tr2-data-centre-in-toronto/>

³ "Artificial Intelligence Data Centres Strategy," *Government of Alberta* December 4, 2024, <https://www.alberta.ca/artificial-intelligence-data-centres-strategy>

⁴ "Ontario's Energy Plan Unlocking Opportunities in the Digital Economy," *Government of Ontario Newsroom*, July 2, 2025, <https://news.ontario.ca/en/release/1006141/ontarios-energy-plan-unlocking-opportunities-in-the-digital-economy>

⁵ Bradshaw, *ibid.*



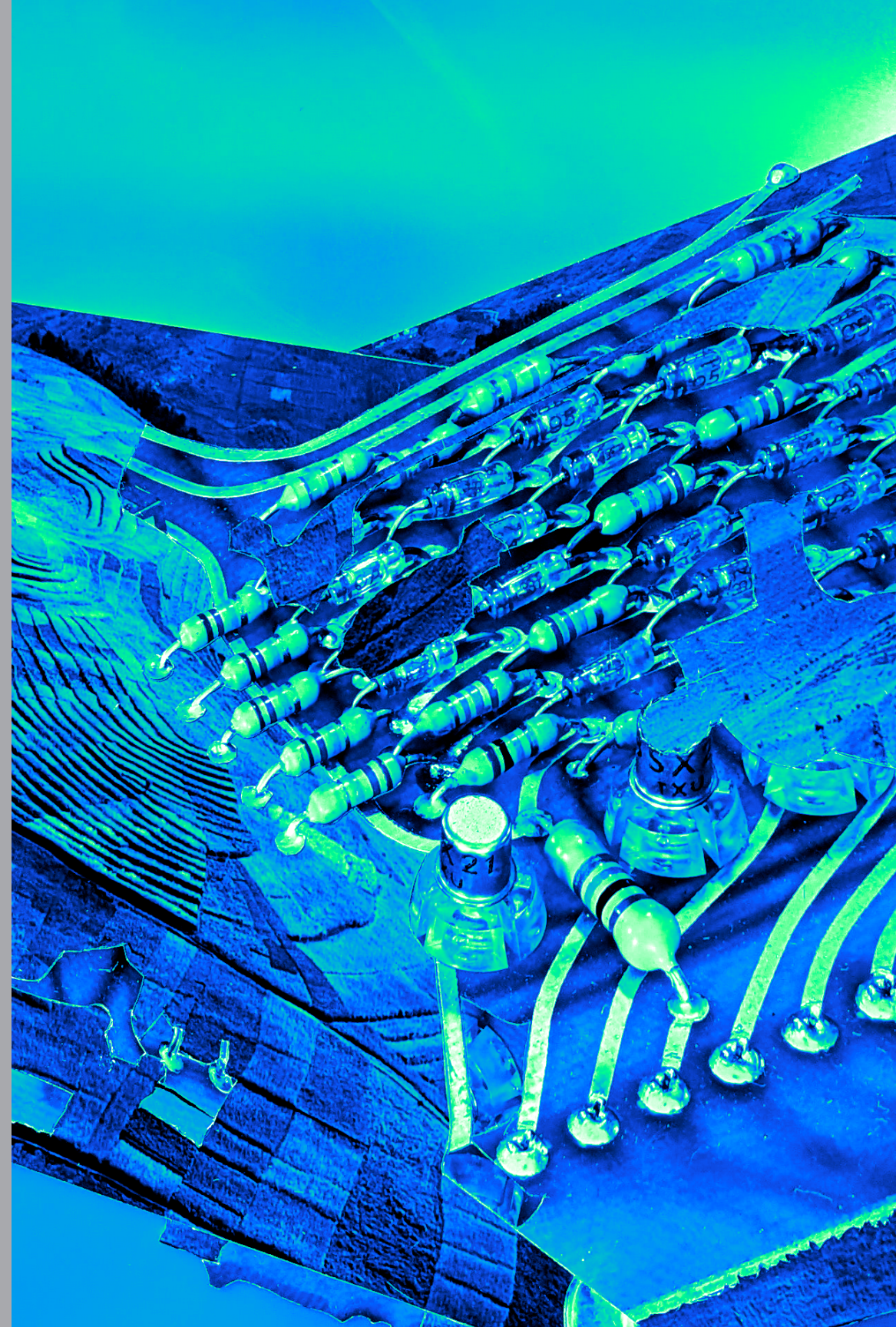
phenomena can occur, generated by the concentration of intense heat, electricity, moisture and cooling systems.⁶

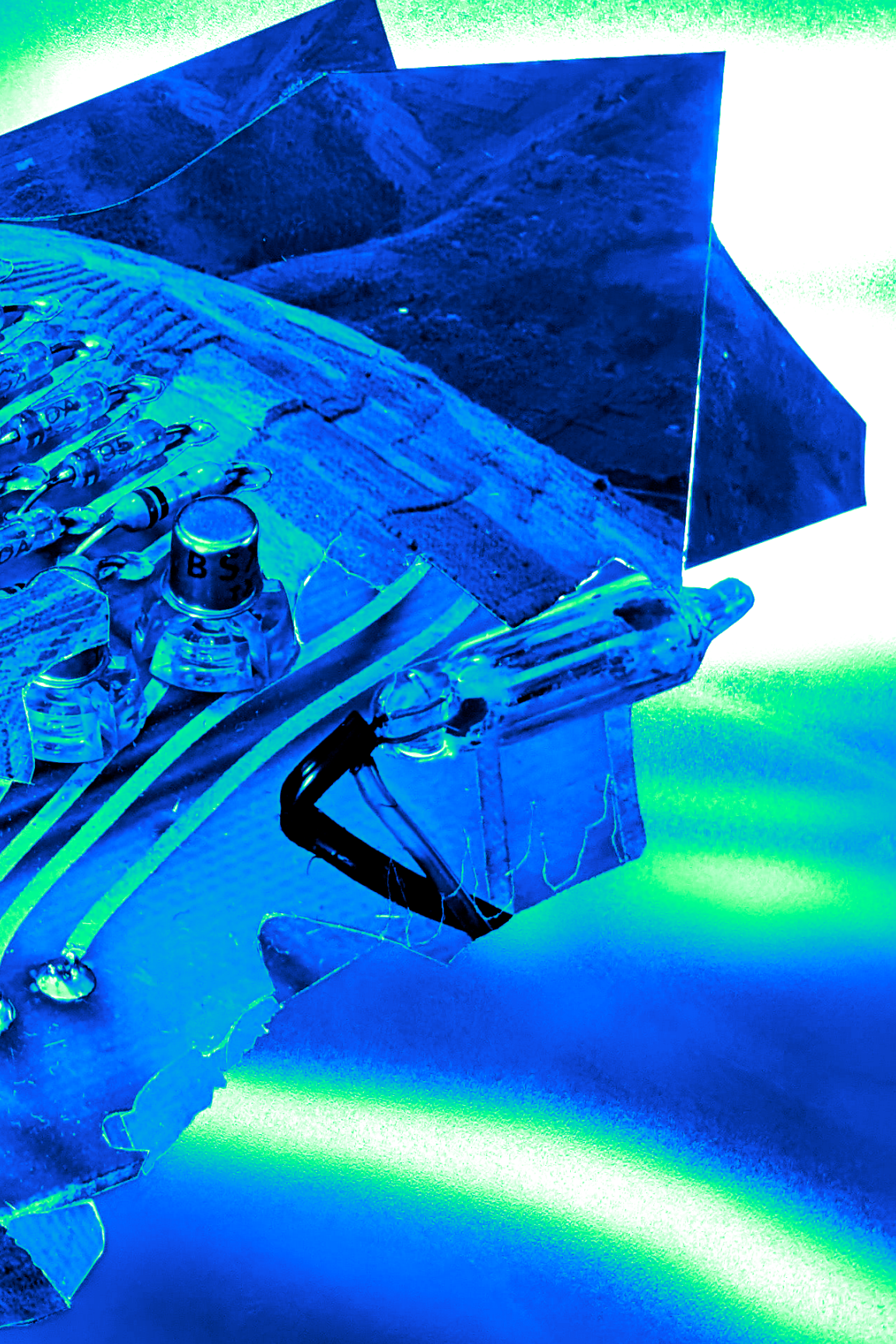
It is these failures and encroachments upon the technological realm that guides Soft Turns' exhibition, *Cold Data*. In lieu of stories about technology's infiltration and monopolization of nearly every aspect of our lives, Soft Turns hypothesizes what it might mean if the reverse should occur. What if, instead of seeing technology as an omnipotent, semi-autonomous force, we recognized it as a human construct, subject to the same vulnerabilities and weaknesses as ourselves? How might an emphasis on technology's material basis shift the dynamics of power between end-users and big tech, between black-boxed algorithms and the people they feed from? Anchored by the figure of the data centre—as an architectural typology, a singular junction and a symbol for the hyper-

connected world we now inhabit—the artists probe, unearth and root around in a hypothetical space that asks us to consider the possibilities that arise when the natural world and technological world meet on equal footing.

In an [earlier essay](https://gizmodo.com/facebook-data-center-humidity-challenge-was-indoor-rain-512173504), I described how the use of nature metaphors to describe mechanical and technological objects naturalizes man-made systems and entities. The cloud is a modern paradigmatic example, invoking a sense of weightlessness and ephemerality that belies the ravenous infrastructure that draws sustenance from the earth: from energy grids powered by natural resources to cooling systems that require filtration systems drawn from public water systems to expansive swathes of land connected by entrenched fibre optic cables.

⁶ Lily Hay Newman, "Facebook's Data Center Humidity 'Challenge' Was Indoor Rain," *Gizmodo*, June 9, 2013, <https://gizmodo.com/facebook-data-center-humidity-challenge-was-indoor-512173504>





Here the artists make the metaphor material. In their new film, *Cold Data*, Soft Turns tell a modern horror story of progressive entropy and decay. Long durational shots of a data centre hum, click and whirl with the sound of trillions of bits of data being created, deleted, transformed, the steady thrum of industrial fans and cooling systems pulsating in the background. Wispy clouds emerge, haunting the edges of the frame as a faint grey spectre drifting atop unsuspecting servers before condensing into a thick, impenetrable layer of moisture blanketing the server racks in dense white fog that obfuscates their orderly rows and tidy columns delineated by blue, red and green LEDs. Snow piles form and the staccato drip of melting snow suggests a catastrophic failure.

In the final image, the air shimmers and ripples with heat, foreshadowing a limit to the unlimited demands on finite resources. The sense of foreboding compels us to consider not only what our world might look like without the stabilizing connective tissue of the digital realm, but also, what kind of cataclysmic event might have caused such a catastrophe to occur—climatic, human or otherwise.

A series of new photo-montages, *Rare Earth*,

exploits the visual and formal affinities between natural and technological objects to generate unnerving images that disrupt the smooth continuous surface of the photograph. Each work combines two source images: a piece of technological hardware (printed circuit boards from various historical eras⁷) spliced onto an image of an anthropogenic landscape (terraced rice paddies in northern Vietnam; oil fields in the Permian Basin; center-pivot irrigation agricultural fields in Kansas), and affixed to polarizing film.

The series' title refers to rare earth elements, a category of seventeen elements used extensively in the production of electronic devices. Despite their name, rare earths are found abundantly in the earth's thin crust; Canada is estimated to have the largest known reserves of rare earth resources at over 15.2 million tonnes.⁸ However, due to their geological formation, rare earths are often dispersed over large areas rather than concentrated in localized deposits. Mining and processing rare earth elements thus requires exhuming large volumes of material that must be refined using often toxic and sophisticated separation techniques. As a result, most of the global market's supply is sourced from countries with lax environmental laws, weak

Soft Turns,
rare earth
[terraced
resistors]
[detail],
15 x 32 inch
collage of
two inkjet
prints, 2024,
[previous
pages]

7 Printed circuit boards are used to connect and support multiple electronic components, transmitting electrical signals within devices and handling complex processes such as data storage, processing, and communications. They are found in nearly all electronic devices.

8 "Rare earth element facts," *Natural Resources Canada*, accessed July 2025, <https://natural-resources.canada.ca/minerals-mining/mining-data-statistics-analysis/minerals-metals-facts/rare-earth-elements-facts>

enforcement and high degrees of technological development—allowing wealthier, primarily Western nations to outsource the environmental and human burden of technological advancement.⁹

Although the source images are digital, the artists adopt an analog, cut-and-paste methodology, a technique that harkens back to modernist avant-garde gestures that turned to photomontage and collage as a means of political resistance and protest. In the decades since, collage has been usurped by the very capitalist, colonialist and political forces the technique once agitated against, taking on an uneasy position between popular and art-historical visual forms exacerbated by the advent of new digital forms of splintering and recombination.

Given the trajectory of the medium, what significance might we infer from Soft Turns' turn to collage? Writing in 2009, in the midst of the fallout from the global financial crisis, American artist and academic Charlie White hypothesized that the re-emergence of collage was, "symptomatic of a desire to confront art's embeddedness within political crisis, market fluctuation, and con-

sumer taste...collage seems to be riding a wave of political corruption, shrapnel, and personal loss to reemerge as a legitimate contemporary language."¹⁰

Today, Soft Turns' uptake of cut-and-paste collage may embrace the visual language for similar goals, albeit less as a response to global financial corruption and grief (although there is still plenty of that to go around) than as a timely reaction to a rapid destabilization of social norms and practices engendered, but not limited to, the rapid development of advanced technologies like artificial intelligence—technologies that adopt collage's logic of recombination and recontextualization and push it to an extreme algorithmic conclusion.

Each circuit board segment is oriented to merge into the landscape, highlighting the visual kinships between these distinct typologies. The gesture of interleaving the two images places both the landscape and the technological device on the same plane, erasing formal and aesthetic hierarchies and suggesting the material and earthly basis of our technology-driven world. In doing so, they draw attention to the human- and industrial logics that

⁹ Today, China mines 70% of rare earth elements and produces 87% of refined rare earth elements—effectively controlling the global market. The concentration of the global supply of rare earth elements has resulted in significant geopolitical concerns, such as the recent trade dispute between China and the U.S. in which China threatened to withhold the export of specialized rare earth magnets used in various military and aerospace applications. Ibid; Laurie Chen and Fanny Potkin, "Exclusive: US-China trade truce leaves military-use rare earth issue unresolved, sources say," *Reuters* June 15, 2025, <https://www.reuters.com/world/china/us-china-trade-truce-leaves-military-use-rare-earth-issue-unresolved-sources-say-2025-06-15/>

¹⁰ Charlie White, "Cut and Paste: The Collage Impulse Today," *Artforum* 47, no. 7 (March 2009), <https://www.artforum.com/features/cut-and-paste-the-collage-impulse-today-190356/>

Soft Turns,
stills from *Cold Data*,
HD video, 2025

operate on both the macro- and micro-scales, yielding parallel forms and structures that span fields and industries—flattening the unique conditions of creation to transform matter into homogenous and predictable modes of production.

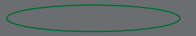
In the centre of the gallery lies the carcass of the data centre, now

weathered and aged after being subjected to months of spring rain and blistering summer heat at a farm outside of Hamilton. Without a constant injection of energy, labour and resources, data centres and the hyper-connected, late capitalist technological domination they enshrine are vulnerable to the inevitable forces of entropy. In its place,

the artists have transformed the remains of the data centre into a temporary greenhouse.

For Soft Turns, the greenhouse and the data centre are architectural and infrastructural doppelgangers: spaces that share many traits and yet, through their similarities, reveal fundamental divergences.

Through this transmutation, the artists suggest an alternative to the catastrophe implied at the end of their film, one in which the spaces where the natural and the technological realms converge are no longer governed by a logic of domination but instead by a relationship of reciprocity and symbiosis.



Wei Yi Chang

is an independent writer and curator whose research lies at the intersections of ecology, environmental ethics, climate change, politics, capitalism and time. Wei Yi has curated exhibitions and programs in Canada, the United States, and Germany. Her art criticism and essays have been published in *Canadian Art*, *C Magazine*, and *Luma Quarterly* and she has contributed to numerous exhibition catalogues published by the Whitney Museum of American Art, Documenta 14, Morris and Helen Belkin Art Gallery and more.

Wei Yi was a 2019–20 Helena Rubinstein Curatorial Fellow at the Whitney Museum of American Art's Independent Study Program. She holds a MA in Art History (Critical and Curatorial Studies) from the University of British Columbia and a BA (Honours) Major in Art History and Major in Philosophy from Western University.

Soft Turns is the collaborative effort of Wojciech Olejnik and Sarah Jane Gorlitz. Alongside simple mechanisms—pulleys, mirrors, paper, lenses—and crucially, their own bodies, they use stop-motion animation's capacity to stretch and collapse time, to attempt to get as close as possible to the rhythms of their subjects. The results are slow-paced, immersive, intimate video-centred installations. Recent research interests include: controlled artificial environments such as greenhouses and data centres, plant-human interactions and the physics of information. Feature articles about their work have been published in *Canadian Art* and *Esse*. Their work has been exhibited across Canada and internationally, most recently at the Plumb (Toronto, 2021) 8eleven (Images Festival, 2018), and The Art Museum at the University of Toronto (2018). Together, they have been privileged to live and participate in several communities abroad and in Canada, including a pivotal three year residency at the School of Environmental Sciences, University of Guelph (2016–19).

ESSAY AUTHORED BY GALLERY 44'S 2023–2024 WRITER-IN-RESIDENCE, WEIYI CHANG, ON THE OCCASION OF *COLD DATA*, AN EXHIBITION BY 2023–2024 ARTISTS-IN-RESIDENCE, SOFT TURNS.