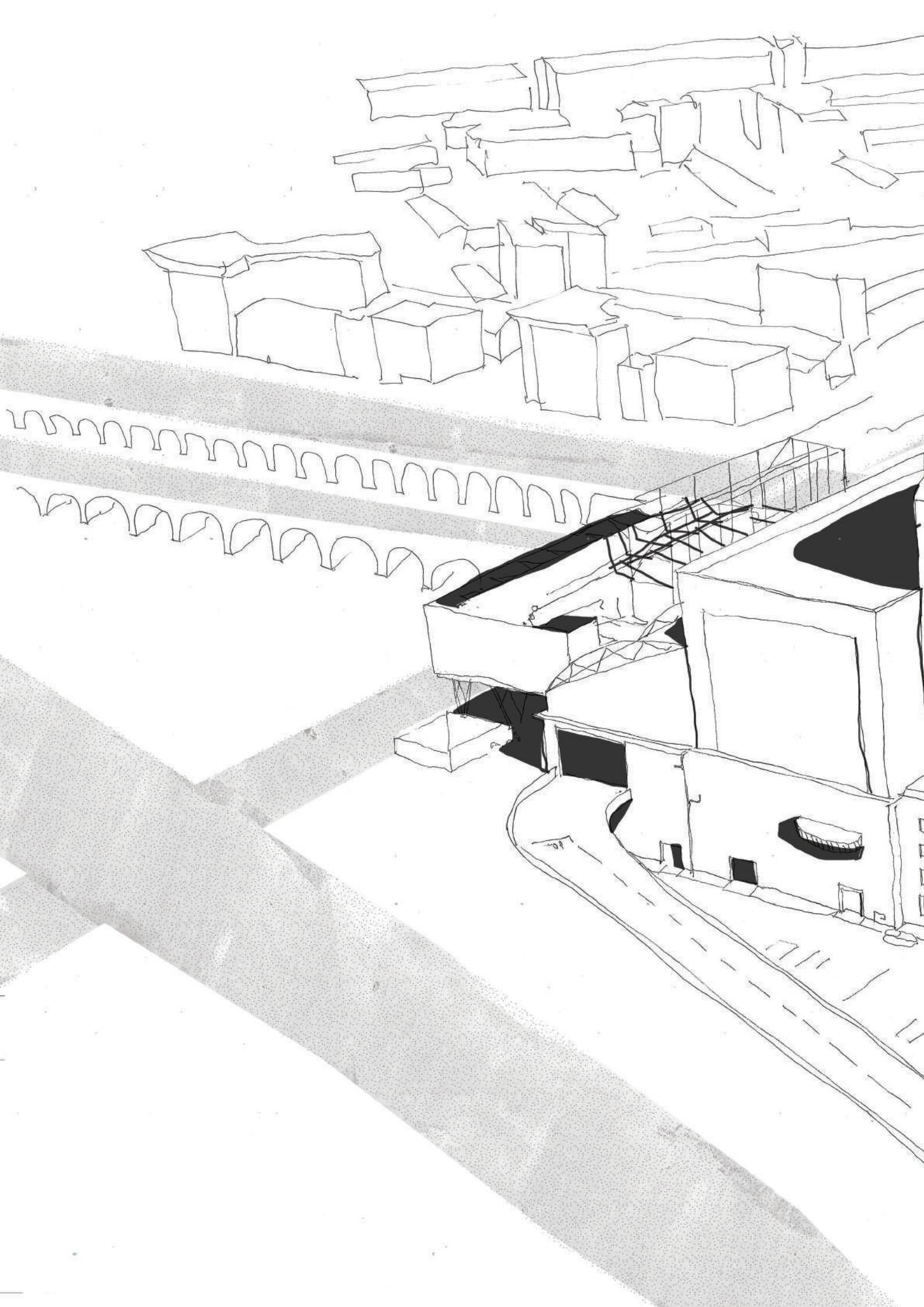
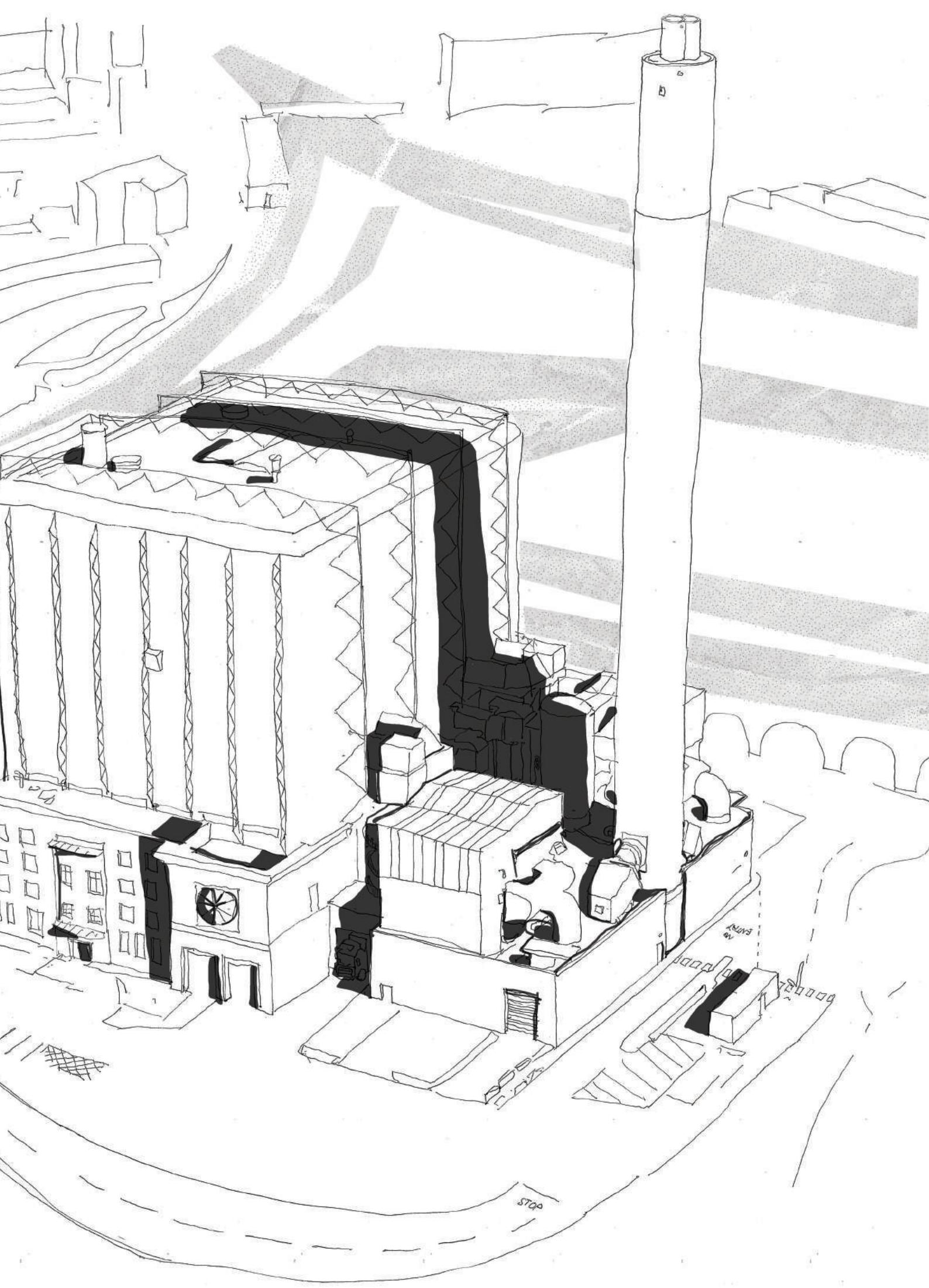


CAMERON BRAY

CRITICAL DESIGN REPORT
APRIL 2020

**WHAT DOES A
CIVIC WASTE
FACILITY
LOOK LIKE?**





welcome to my Critical Design Report

The text below is split into four sections documenting the history and theory behind my work.

Introduction

Central Critical Concerns

Proposal

Symposium

I request that you read this document as a double spread. On a MAC, you can find this setting in preview. You click view > *both pages*. If you're using Adobe Acrobat on a PC it's the same process.

thanks and enjoy

INTRODUCTION

Our household waste is processed using high-tech machinery, with the aim of extracting as much value from it as possible. Framed by the policies of ecomodernism^{1*}, refuse becomes a resource that's burned to produce electricity and heating. It's also processed industrially to make fertiliser, raw materials, aggregates, and other building components. I propose a different, less harmful approach aligned with the demands of the climate crisis and relevant at a local, civic level.

In recent decades, as the responsibility for utilities has shifted from the public to the private sector, so have the priorities. For the businesses that process rubbish, "the more waste, the better."² Attaching profit to waste management means there is no incentive to produce less of it, a clear environmental target³. Meanwhile, policy framework encourages the centralisation of waste facilities⁴, resulting in the construction of enormous pieces of infrastructure on an urban-scale. Conversely, these facilities have a detrimental impact on their local environment, from the emission of odours, vehicle movements around the plants, smoke from incinerators and noisy machinery.

In the spirit of the Right to the City^{†5}, I suggest we have the right to the potential embedded in what we throw away. Moving from private waste contracting to a public, localised service, I believe we can return to organic ways of treating refuse, and refocus our efforts on moving materials up the waste hierarchy^{‡6}. We

can continue to generate heat and electricity from waste materials as we do now, but these should be distributed locally and at a subsidised rate. Power plants should be places that are open to the public, with leisure facilities and green space. They should be enjoyable places to visit. Now is the time to act. Covid-19 has reignited the argument for decentralisation⁷, and we are reconsidering the value of local networks. The Mayor of London has set up a public energy company, and community electricity generation is gaining traction as government policy. The climate crisis has brought the need to behave differently into sharp focus. We must deal with our waste locally. In recent months, local authorities have brought their waste management in-house⁸, which is the first step in this direction.

Focusing on a waste-to-energy incinerator on Surrey Canal Road, in South East London, I imagine its successor. Behold the Civic Waste Facility.

1 Monbiot, George. 'Meet the Ecomodernists: Ignorant of History and Paradoxically Old-Fashioned'. The Guardian. 24 September 2015. <https://www.theguardian.com/environment/georgemonbiot/2015/sep/24/meet-the-ecomodernists-ignorant-of-history-and-paradoxically-old-fashioned>.

2 Levidow, Les, and Sujatha Raman. 'Metamorphosing Waste as a Resource: Scaling Waste Management by Ecomodernist Means'. Geoforum 98 (January 2019) p.111

3 ibid p.108

4 ibid p.111

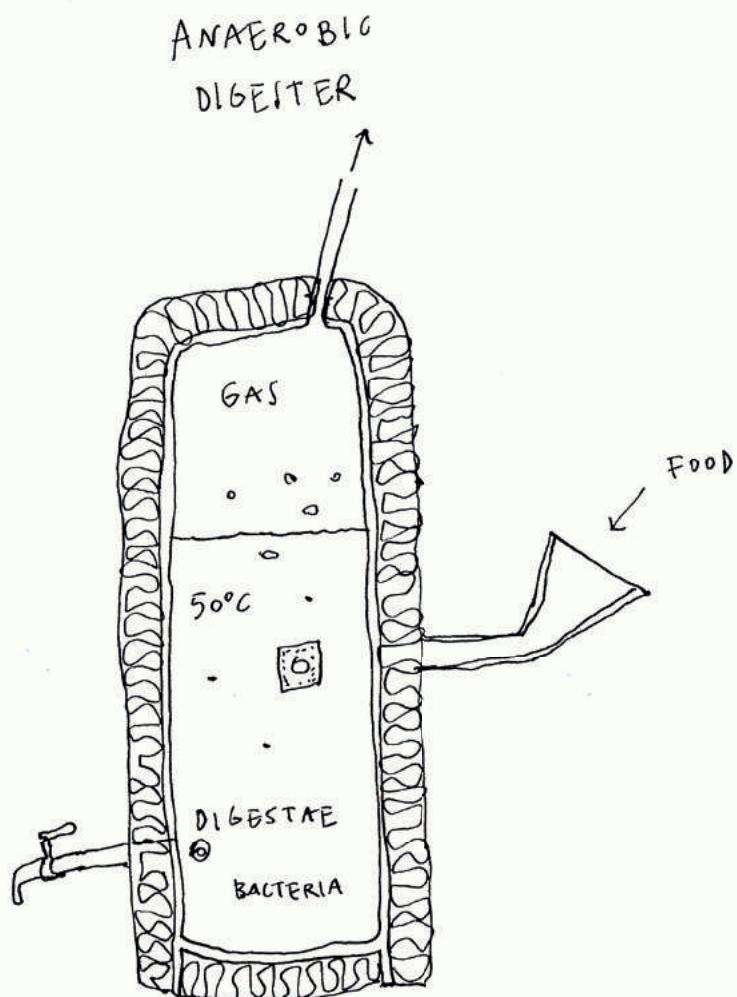
5 Heynen, Nik, Maria Kaika, and E. Swyngedouw, eds. In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism. Questioning Cities Series. London ; New York: Routledge, 2006. p.12

6 'Guidance on Applying the Waste Hierarchy'. DEFRA. Accessed 28 April 2020. <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach->

ment_data/file/69403/pb13530-Waste-hierarchy-guidance.pdf.

7 Wainwright, Oliver. 'Smart Lifts, Lonely Workers, No Towers or Tourists: Architecture after Coronavirus'. The Guardian. 13 April 2020. <https://www.theguardian.com/artanddesign/2020/apr/13/smart-lifts-lonely-workers-no-towers-architecture-after-covid-19-coronavirus>.

8 Let's Recycle. 'Tower Hamlets to Bring Waste Services In-House'. 16 November 2018. <https://www.letsrecycle.com/news/latest-news/tower-hamlets-to-bring-waste-services-in-house/>.



* Ecomodernism, as defined by George Monbiot, hopes that "with the help of science, technology and development, ... human impacts on the natural world can be decoupled from economic activity."¹ Levidow and Raman examine ecomodernist approaches to waste management in UK, looking in particular at the policy frameworks and the metamorphosis of waste into a resource.²

† The Right to The City is a call for the participation of citizens in the co-creation of urban space from the philosopher Henri Lefebvre. Urban Political Ecologists believe that this should involve the 'metabolism' of the city too, that's to say a right to determine what and how materials flow within it.³

‡ According to DEFRA, the Waste Hierarchy ranks waste management options according to what is best for the environment. It's usually drawn as an inverted triangle of preferences.⁴

CENTRAL CRITICAL

The city of today is made and managed by a myriad of bodies that blur the line between private and public interests. As Anna Minton explains, buildings have become vehicles for investment, with a wedge driven between their use-value (how tangibly useful they are) and their exchange-value (how much they are worth on the market - this is disconnected from the local market but rather subject to international flows of finance)¹. The production and exchange of architecture has become a very lucrative business, but this commodification of space extends beyond buildings themselves. In the past, the spaces between structures belonged to local authorities on behalf of residents. Today, investors control whole districts, creating privately owned enclaves within the urban fabric, dressed up as legitimate public space, but with profit taking centre stage.² This approach arrived in Britain in the 1990s, an import based on American shopping mall design.* First seen in the redevelopment of the docklands, it's now the default regeneration strategy, in use up and down the country³. This proliferation was accelerated in 2004 with an Act of Parliament which redefined 'public good' to focus more on the economic impact of development as opposed to its relevance to existing residents.⁴

Looking at the infrastructures that service the city, which Keller Easterling† calls its 'operating system', a similar story plays out.⁵ The enclaves described above are managed by a fleet of subcontracted cleaners, maintenance staff, security forces and even first aiders - roles typically belonging to public servants. In the rest of the city, a similar picture emerges, with large corporations in charge of a range of public services. Amazon servers host the data for Companies House⁶, large parts of the NHS

are managed by Virgin⁷ and G4S⁸ - originally a record company and a security firm. Meanwhile, the German, Dutch and French state-owned railways hold franchises for buses and trains across Britain.⁹ With Google profiting from the data you unwittingly share with them, it's not too hard to imagine them winning a contract to police the city of the future.¹⁰

By definition, a public utility is aimed at catering to the needs of its users, the taxpayers who fund it. Originally, these services were provided by the public sector, but as neoliberalism was embraced in recent decades, infrastructures or the contracts to run them were sold.¹¹ However, when utilities are run by the private sector, there are some conflicts of interest. Global corporations lack accountability, and they struggle to adapt to the specific conditions of different places.¹² I argue that utilities require a long-term ambition and investment beyond the myopic relationship to shareholders and profit.¹³

.....

[uk/2019/07/02/making-the-best-use-of-cloud-capabilities/](https://www.uk/2019/07/02/making-the-best-use-of-cloud-capabilities/).

7 Osborne, Hilary, 'How Virgin Became One of the UK's Leading Healthcare Providers', *The Guardian*, 5 August 2018, sec. Society, <https://www.theguardian.com/society/2018/aug/05/how-virgin-became-one-of-the-uks-leading-healthcare-providers>.

8 Smyth, Jamie and Plimmer, Gill, 'G4S Shares Rise as It Wins New Contracts Worth £450m', *Financial Times*, 9 May 2016, <https://www.ft.com/content/9705e266-1379-11e6-91da-096d89bd2173>.

9 'Trains on UK Railways Now Almost Entirely State-Owned - by Foreign Countries', *The Independent*, 14 August 2019, <https://www.independent.co.uk/news/uk/home-news/trains-uk-railways-renationalise-countries-operators-companies-a9058961.html>.

10 Anushka Asthana and Alex Hern, 'How Much Does Google Know about You?', *Today in Focus*, accessed 24 November 2019, <https://www.theguardian.com/technology/audio/2019/aug/06/how-much-does-google-know-about-you-podcast>.

11 Levidow, Les, and Sujatha Raman, 'Metamorphosing Waste as a Resource: Scaling Waste Management by Ecomodernist Means', *Geoforum* 98 (January 2019) p.109

12 Bakker, Karen J. *Privatizing Water: Governance Failure and the World's Urban Water Crisis*. Ithaca, N.Y.: Cornell University Press, 2010. p.172

13 Bentley, Zak, 'OMERS Ups Stake in Thames Water despite Nationalisation Rhetoric', content, Infrastructure Investor (blog), 15 February 2018, <https://www.infrastructureinvestor.com/omers-ups-stake-thames-water-despite-nationalisation-fears/>.

1 Minton, Anna. *Big Capital: Who Is London For?* (London: Penguin Books, 2017) p.8

2 Minton, Anna, *Ground Control: Fear and Happiness in the Twenty-First-Century City* (London: Penguin, 2012) p.10.

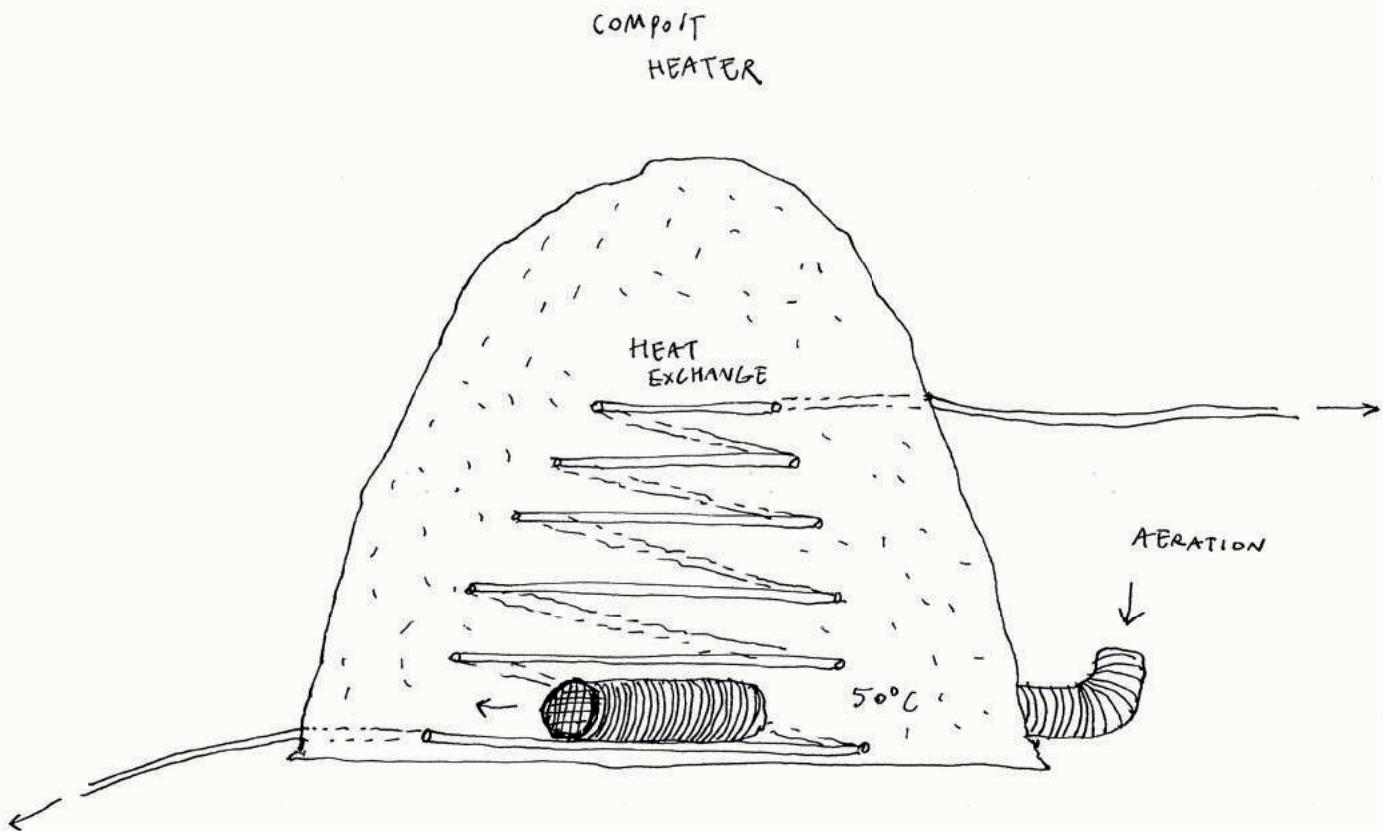
3 *ibid* p.5.

4 *ibid* p.22.

5 Easterling, Keller, *Extrastatecraft: The Power of Infrastructure Space*, Paperback edition (London New York: Verso, 2016) p.13.

6 'Making the Best Use of Cloud Capabilities - Companies House', Companies House Blog (blog), accessed 24 November 2019, [https://companieshouse.blog.gov.](https://companieshouse.blog.gov/)

CONCERNS

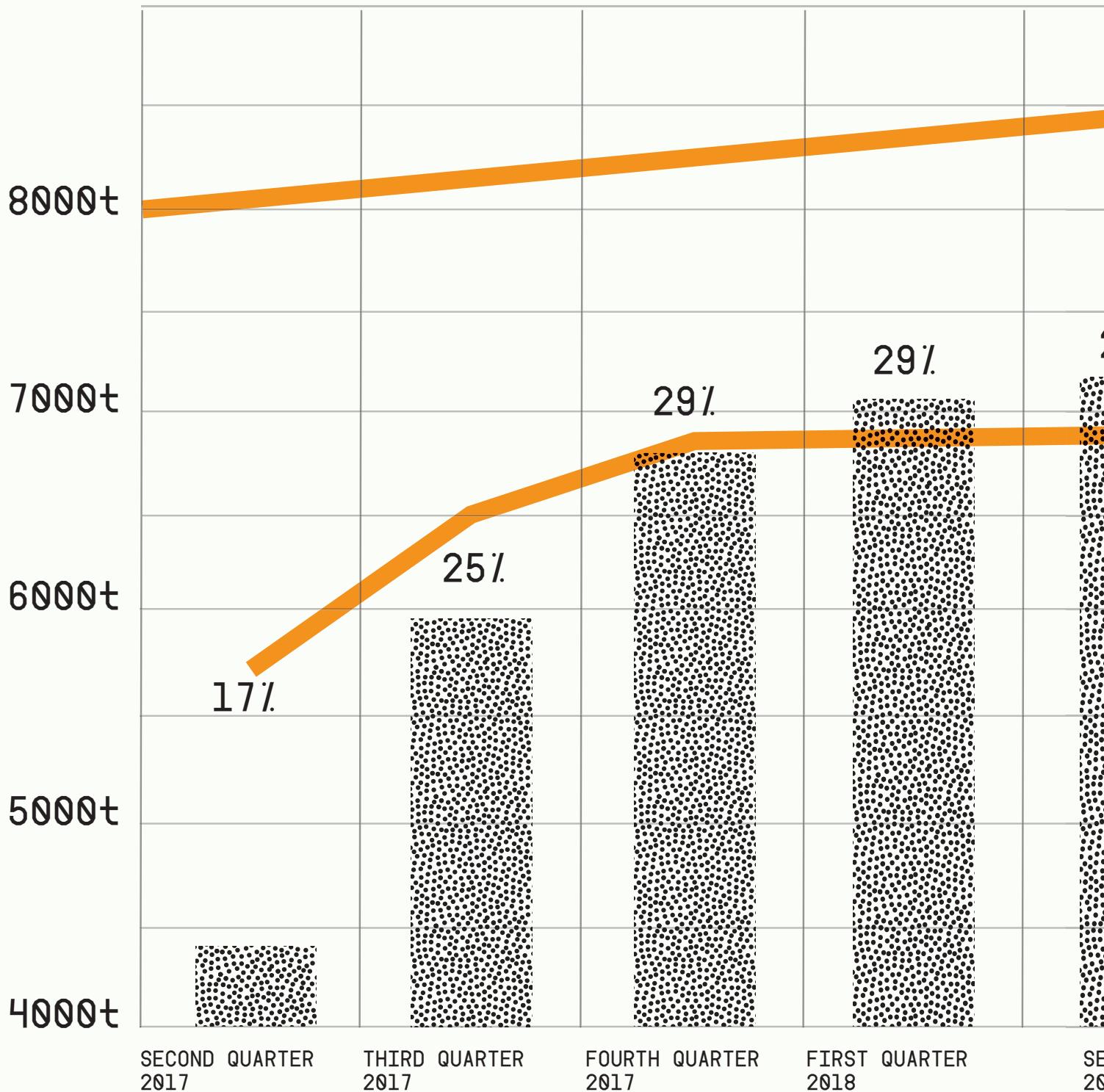


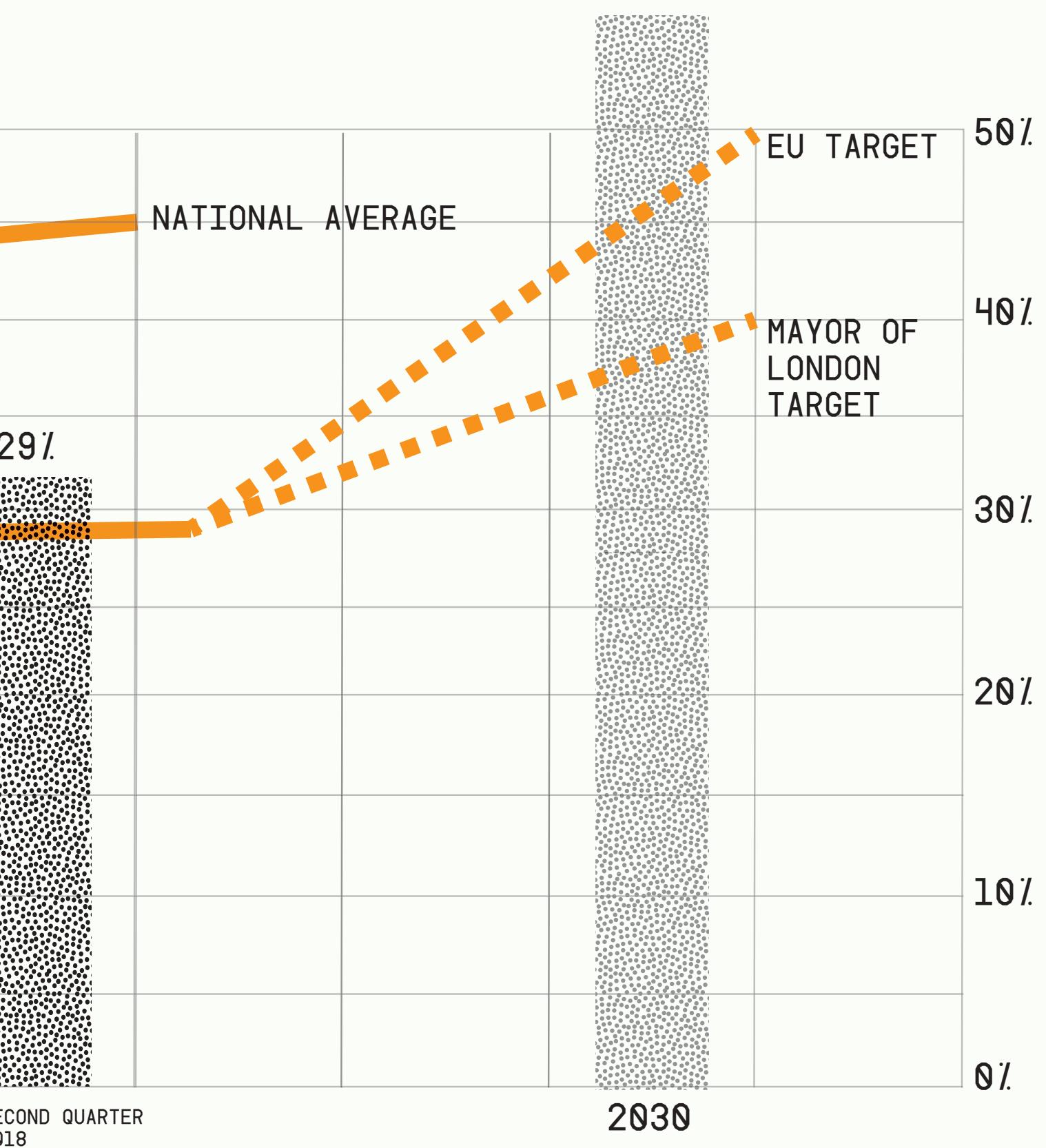
* Anna Minton's Big Capital and Ground Control situate architectural discourse within the political and economic shifts of the late 20th Century. This is the period when free-market capitalism took off, based on the principle of a shrinking public sector being replaced by a consumer choosing between different products from rival businesses. Flows of money and influence started to expand more globally, with a shift towards large multi-national corporations operating around the planet, often at the expense of smaller businesses. The making of architecture follows the same trajectory, with an increase in large private landowners building bigger slices of the city and operating in different countries. American shopping malls were seen as the blueprint for subsequent developments, which mirror their conditions - large plots of land outside of the public realm; different sets of rules to the rest of the city; and a dedication to commercial uses which puts profit centre-stage.

+ Keller Easterling expands on Anna Minton's story by mentioning other hidden systems that define space, such as the turning radius of a lorry, the standard size of a sheet of ply, and so on. She goes on to explain the influence of neoliberalist (the value system of the free-market) economics in the infrastructures that underpin the functioning of spaces, in this case the servicing of cities through public utilities, transport and health.

The Metropolitan Board of Works, precursor to the London County Council (followed by the GLC and now the GLA) was responsible for the construction of London's sewage system. However, many private stakeholders were originally responsible for public utilities - electricity supply, for instance - where they often hold a natural monopoly. This is the principle I object to here, as the rules of the free-market - that you can choose the best product for you - don't apply. On top of that, when a multi-national corporation is involved, profits are rarely reinvested locally, but become part of a global portfolio. This makes it easy for companies to hide their profits and avoid paying tax by moving earnings offshore, putting public funds under strain. The term Local Multiplier Effect alludes to the idea that reinvesting in an area benefits the local economy, a factor that adds to my argument for bringing waste treatment and power facilities into public ownership at a local scale.

PERCENTAGE OF WASTE RECYCLED IN LEWISHAM COMPARED TO LONDON AND EU TARGETS





This is particularly relevant in the context of Covid-19 and the Climate Crisis, where big expenditure is needed to safeguard society. An example from the past can be seen in the London sewage system.¹⁴ Its construction was a very costly exercise justified by a perceived long term value to citizens, instead of an immediate payoff. Proof of its value lies in the fact that it's still used today.¹⁵ Indeed, it was built in response to cholera epidemics in the 1800s. - perhaps today's pandemic can inspire similar investment in bold pieces of infrastructure.

Waste disposal, traditionally under the remit of local authorities, is now run privately too. Veolia, a French Multinational Corporation, manage waste for 13 London Boroughs - nearly half the city.¹⁶ The logos of local authorities are now subtitled with that of Veolia, appearing on hi-vis uniforms and bin lorries all over the capital. However, I believe that the values behind businesses and public services are incompatible, particularly in the context of waste disposal. Corporations have no incentive to reduce the amount of waste produced, as they are paid per tonne.¹⁷ In recent years, the number of incinerators used to burn waste has exploded.¹⁸ They are considered a 'renewable' system and therefore a way to avoid landfill tax which has increased to £94.15 per tonne¹⁹. But due to the complexity of sorting refuse, it is burned without being separated, meaning a large proportion of recyclable materials are not extracted.²⁰ District Heating systems are left incomplete, as subsidies are weighted towards energy production.²¹ Meanwhile, the policy framework associated with the industry has led to 1/5 of maize grown in the UK being fed

directly into hungry anaerobic digesters, which produce 'green' electricity to the detriment of the soil and rivers around them.²² This is why these processes need to be managed to prioritise the environment and citizens, not profit.

Of course, there are also issues with public sector or community governance of these processes, as Karen Bakker identifies with regards to water management. It is clear that proponents of cooperative management tend "to romanticise communities as coherent, relatively equitable social structures, and to overlook inequitable power relations and resource allocation practices."²³ A reasonable proposal for responsible waste management is their administration at the local-authority level, in collaboration with local groups and small businesses, a term described by Bakker as public-private-community partnerships.²⁴ The presence of a public body as arbiter could help ensure priorities are aligned - Bakker acknowledges that "the state remains, in many instances, the best vehicle through which consumers' interests can be balanced against one another, and against other interests."²⁵

We currently recycle around 45% of our waste in the UK, up from 11% in 2000²⁶, but in other parts of the world the figure is considerably higher. In Mumbai, up to 80% of rubbish is recycled, with cheap labour making it possible to turn a profit from the objects thrown away.²⁷ While it's important not to gloss over the working conditions of those employed in this industry, a proportion of this efficiency can also be attributed to the principles of *jugaad*, a culture of resourceful repair and embedded knowledge, in contrast to planned obsolescence and intellectual property. Charles Jencks' study of *adhocism*²⁸ considers similar vernacular approaches. These customs encourage the use of low-tech answers to complicated questions. They provide an insight into composting and anaerobic digestion (AD),

14 'How Bazalgette Built London's First Super Sewer', Museum of London, accessed 24 November 2019, <https://www.museumoflondon.org.uk/discover/how-bazalgette-built-londons-first-super-sewer>.

15 'Our Customers', Veolia UK, accessed 24 November 2019, <https://www.veolia.co.uk/london/our-customers>.

16 Levidow, Les, and Sujatha Raman. 'Metamorphosing Waste as a Resource: Scaling Waste Management by Ecomodernist Means'. *GeoForum* 98 (January 2019) p.109

17 Our Waste, Our Resources: A Strategy for England, 2018. Department for Environment, Food and Rural Affairs, HM Government. p.76

18 'HMRC - Landfill Tax Rates'. Accessed 28 April 2020. <https://www.gov.uk/government/publications/rates-and-allowances-landfill-tax/landfill-tax-rates-from-1-april-2013>.

19 SELCHP site tour, January 2020

20 Levidow, Les, and Sujatha Raman. 'Metamorphosing Waste as a Resource: Scaling Waste Management by Ecomodernist Means'. *GeoForum* 98 (January 2019) p.118

21 ibid p.114

22 Bakker, Karen J. *Privatizing Water: Governance Failure and the World's Urban Water Crisis*. Ithaca, N.Y.: Cornell University Press, 2010. p.183

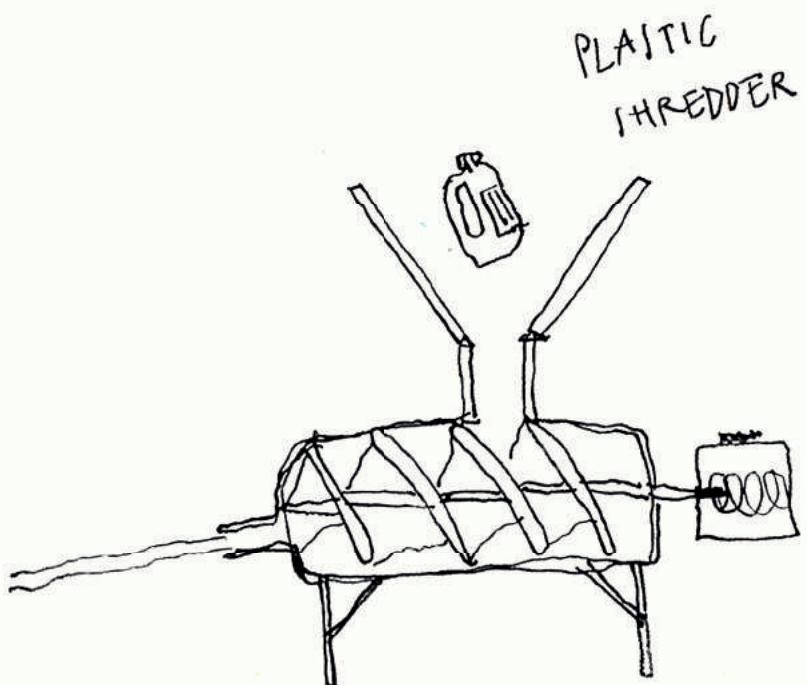
23 ibid p. 179

24 ibid p.179

25 'Our Waste, Our Resources: A Strategy for England' (Department for Environment, Food and Rural Affairs, HM Government, 2018) p.9.

26 Sassen, Saskia. 'The Global City: Strategic Site/New Frontier'. *American Studies* 41, no. 2/3 (2000): 79-95.

27 Jencks, Charles and Silver, Nathan. *Adhocism: The Case for Improvisation*. Expanded and updated edition (Cambridge, Massachusetts: MIT Press, 2013) p.5.



§ In 2001, 9% of municipal waste in England was sent to incineration. By 2018, this was the fate of 41% of our waste.¹⁷

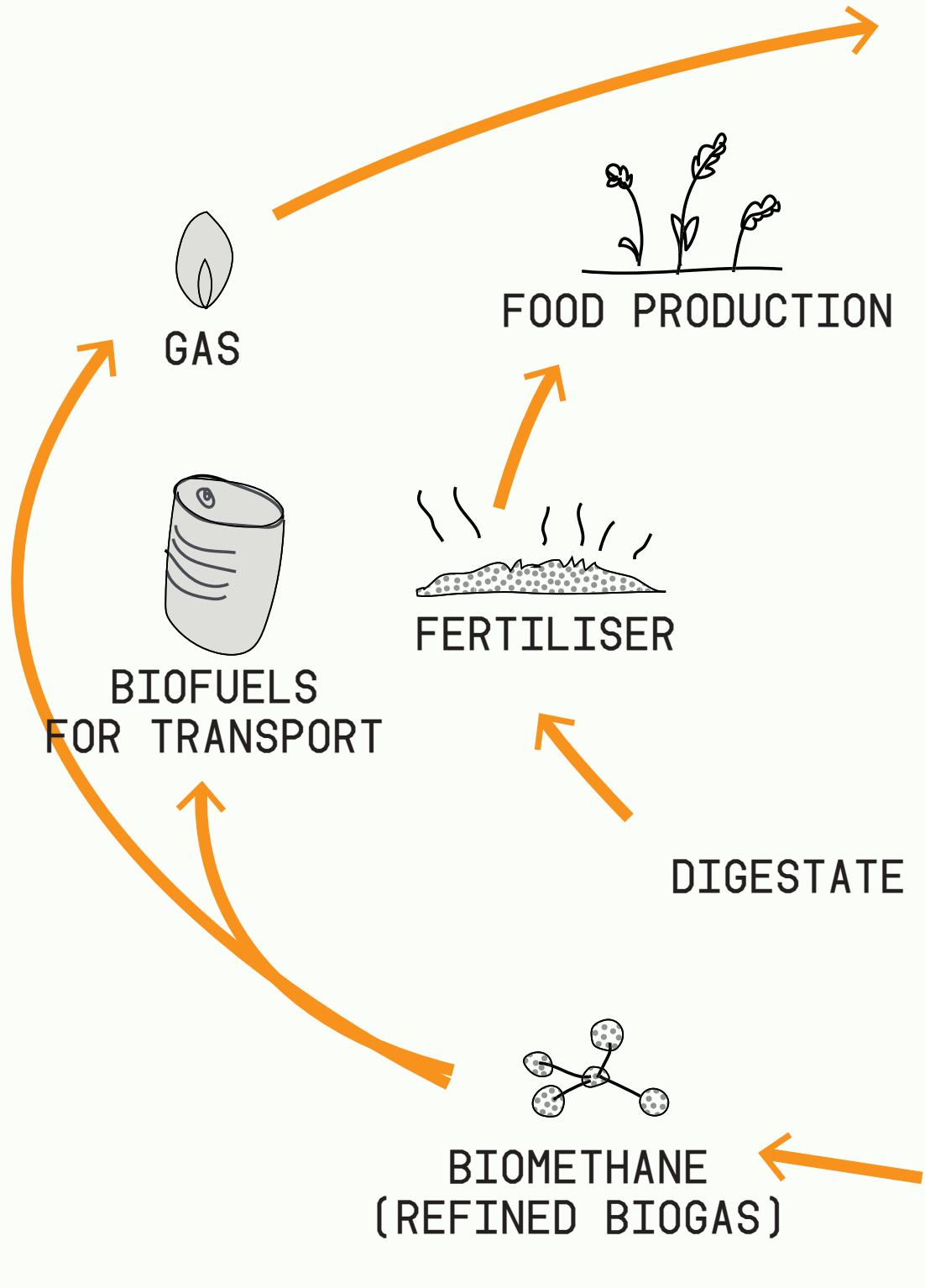
¶ Levidow and Raman explain that "the Renewable Heat Initiative was meant as a market incentive, but has had a subsidy rate much lower than that for renewable electricity." This means that systems are often left incomplete, as is the case for the power station described below.²⁰

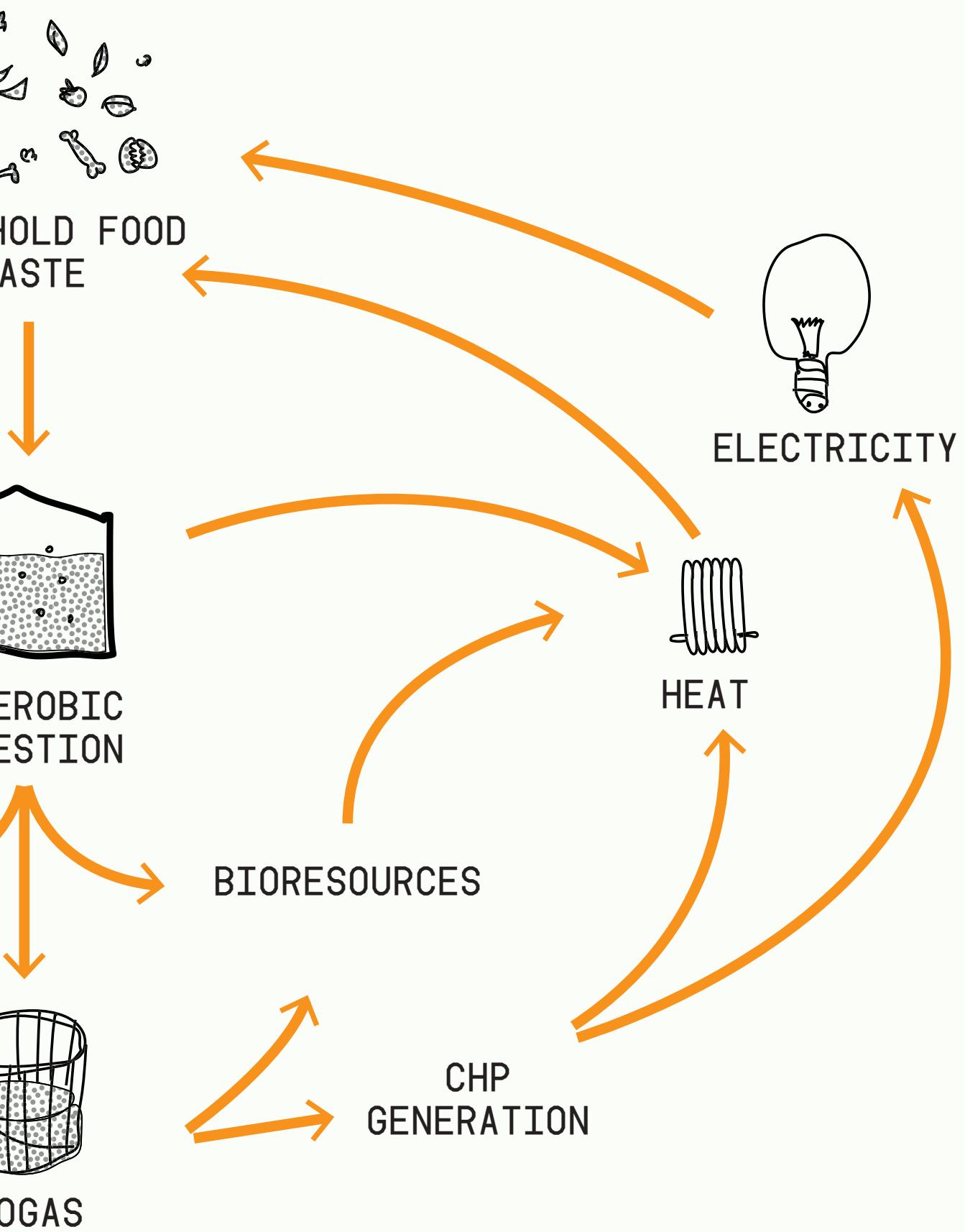
◊ CHP stands for Combined Heat and Power. These are turbines that pass rubbish through a furnace, disposing of it whilst also driving a turbine to generate electricity. Leftover heat from this process is used to heat water, which can be piped to nearby locations.

** Our old computers, full of precious metals and toxic chemicals, end up on the other side of the world to be recycled. This is another indication of the global flows associated with the spread of neoliberalism and the free market. Stories of waste play out across the planet, followed by a flow of capital - an economy of disposal. Meanwhile, Mary Douglas calls for us to examine our reactions to dirt and waste, particularly our revulsion towards it - indeed, cycles of decomposition are entirely natural. Accompanying the expansion of consumerism is the idea of disposability. In this case it's the convenience of weekly bin collections, which mean we can avoid dealing with the actually disposing with anything. At the core of my interests is a desire to reconnect with the entire system, or infrastructure in Keller Easterling's terms, both for our domestic waste and on a global scale, where the consequences of our actions here are part of a formal but perilous economy elsewhere.

†† Common-pool resources are "those from which it is difficult to exclude individuals (either through physical barriers or laws) and for which use by one individual can reduce the benefits available to others."²²

THE PROCESS OF ANAEROBIC DIGESTION





organic processes which have been in use for thousands of years. By combining these methods with rigorous sorting and recycling, as takes place in Mumbai, we could reduce our dependence on incinerators to dispose of waste. AD systems produce biogas which can be burned in the same CHP turbines²⁸, producing genuinely green heating and electricity. And as the use of bioplastics and other compostable materials grows, we can increase our use of such mechanisms. These processes produce a carbon-neutral fertiliser to replace industrially produced ones, and an opportunity to support community growing initiatives.²⁹

Rubbish, following global networks of disposal, disappears from our consciousness as soon as it lands in the bin bag. Yet what we throw away can “disclose ways of living, permit certain ways of seeing”³⁰ the socio-economic context in which it was discarded. In Joseph Beuys’ Ausfegen, he swept up leftovers from a protest and emptied them into a glass container. The rubbish is piled up like layers of sediment - a kind of archaeology of contemporary life.³¹ As the anthropologist Mary Douglas explains, dirt is simply “matter out of place”³² explaining that “the status of waste is relative. Just as faeces is considered dirty when it is on our kitchen tables but less so when it is in our bodies.”³³ It’s not about “what objects are but where those objects are.”**

I believe it’s imperative that we rethink our relationship with what we throw away. We must produce less of it, but also better harness what we do produce as a resource. Our refuse can be used to make new materials, or utilised as a fuel source to heat and power our homes. By subsidising the outputs, we can help to tackle fuel poverty, and fertiliser from AD and composting can be used to grow food in local gardens and parks. In the same way that selling off public space is an assault to our right to the city, the privatisation of waste disposal services removes our right to infrastructure crucial to

the transition to a carbon neutral economy. By bringing them into public ownership, we can place communities and the environment at the heart of the system, ensuring equity and making the best use of the outputs. **We, the public, have the right to the potential embedded in what we throw away.**

To conclude, London is outsourced to a number of private institutions and our public space is perceived in terms of economic opportunity. This has spread as far as public utilities, which are no longer in the hands of the public realm. In the context of waste, its inherent value is invisible to us, but we should consider it as a common-pool resource ††, a civic asset to harness for the public good. Indeed, our discards are becoming part of a cyclical system of reuse. In the hands of private companies however, not only is our rubbish seen only in terms of profit, but our scope to influence it is out of our reach.

In response, I ask what would a civic refuse system look like?

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28 Brown, Gaelan. *The Compost-Powered Water Heater: How to Heat Your Water, Greenhouse, or Building with Only Compost*. Woodstock, Vermont: The Countryman Press, 2014.

29 Viney, William. *Waste: A Philosophy of Things* (London ; New York: Bloomsbury Academic, 2014) p.1.

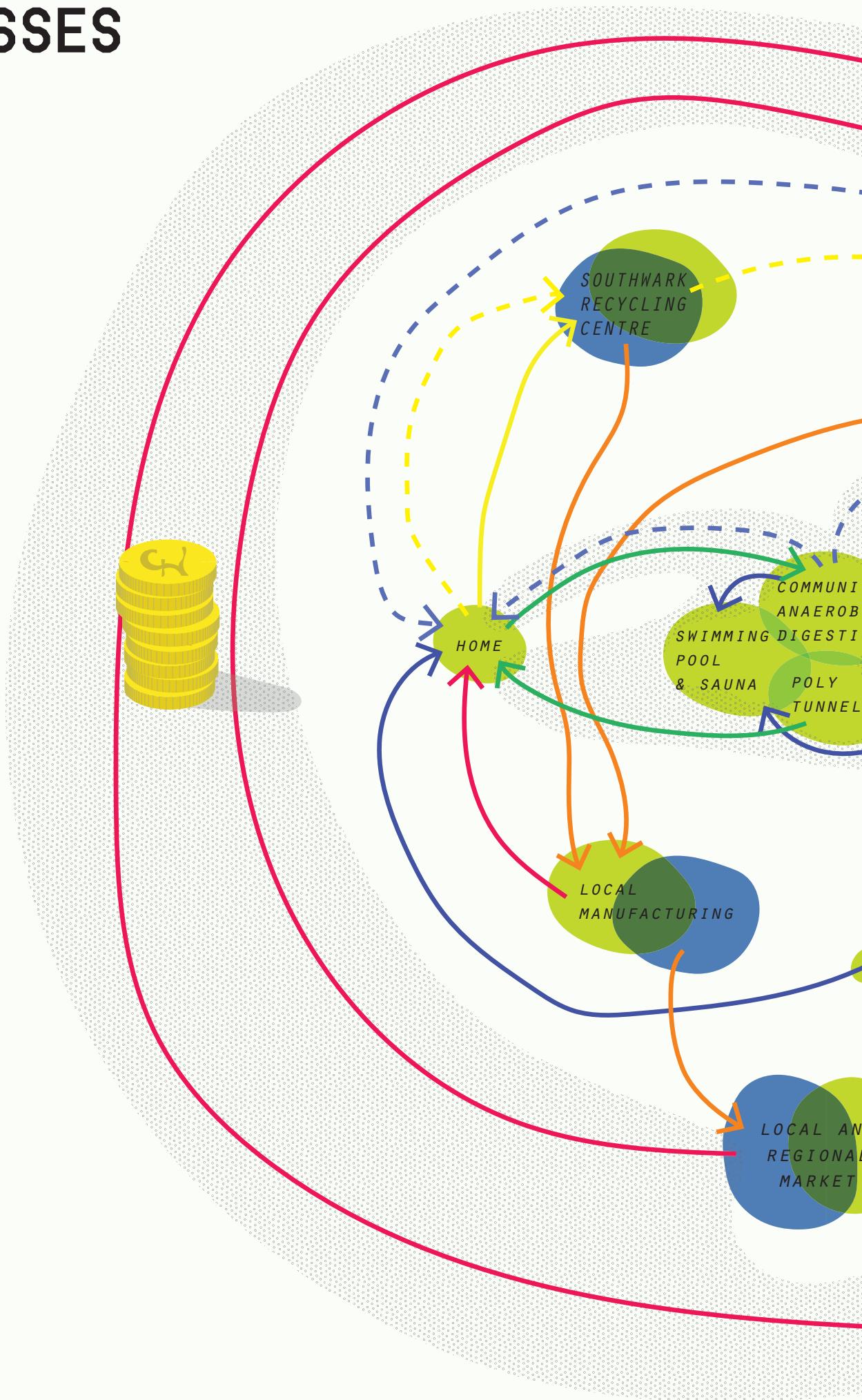
30 Joseph Beuys, *Ausfegen*, 1972, Performance, <http://www.newmedia-art.org/cgi-bin/show-oeu.asp?ID=150000000034295&lg=GBR>.

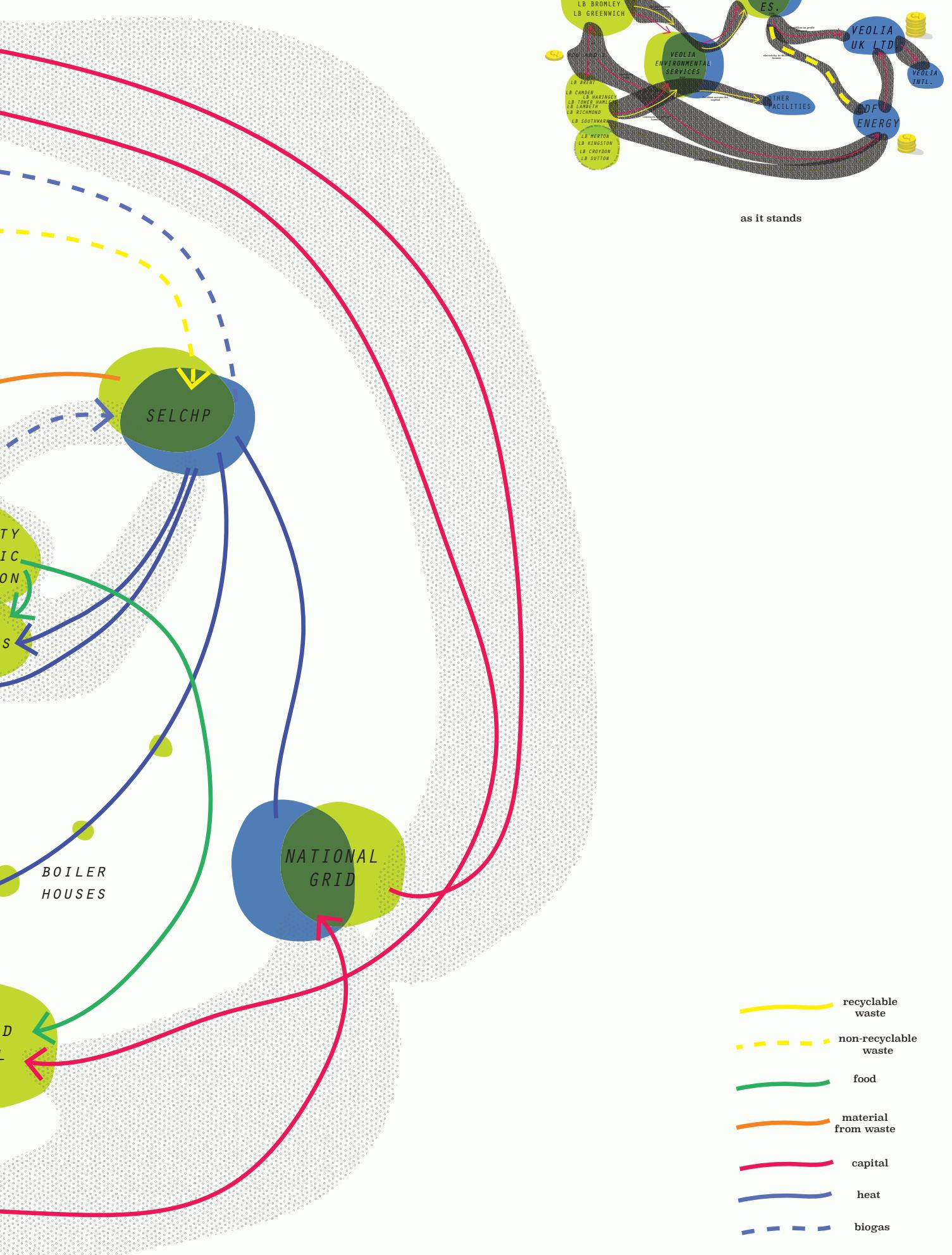
31 Douglas, Mary. *Purity and Danger: An Analysis of Concept of Pollution and Taboo*. Routledge Classics (London : New York: Routledge, 2005) p.2.

32 Viney, William. *Waste: A Philosophy of Things* (London ; New York: Bloomsbury Academic, 2014) p.1.

**WE HAVE
THE RIGHT
TO THE
POTENTIAL
EMBEDDED
IN WHAT WE
THROW AWAY**

LOCALISING WASTE PROCESSES





PROPOSAL

The “terra incognita”¹ of Surrey Canal Road is a landscape of contrasts. It’s a place where jittery mid-week, late-night ravers wander from club to transport hub, stumbling past early-morning bakers going in the opposite direction. A place where artists spend their days silently working away at expansive, expensive oil paintings, while in the yard outside a motley crew of mechanics dismantle and reassemble the carcass of a banged up car. On Surrey Canal Road, the Overground driver walking to the depot in her hi-viz suit plods past the stonemason on a cigarette break. On a Saturday, local hobbyist beekeepers accompany a swarm of rowdy Millwall fans along the footpath to their chosen down-time activities. The following morning, worshippers pile into the Christ Restoration International Centre for an hour or two of contemplation. Deliveroo drivers, strapped to their cargo of turquoise boxes, zoom past to collect fry-ups from a nearby industrial kitchen, catering to the local hangover-takeaway surge. Hours later, as the new week begins, hordes of middle-aged-men-in-lycra commandeer the path for their furious two-wheeled commute - between the hours of 7-9am and 5-7pm. As the sun sets, ping-pong nearly-semi-professionals scurry into their chosen warehouse.

On Surrey Canal Road, time is kept by the regular clickety-clack sound of passing trains, as they navigate the network of viaducts above. Today, the units of time are more spaced out than ever before. The rhythms of the city have been halted - hopefully temporarily - while we are confined to our homes to weather the storm. Some of these rituals cannot be halted though, so the regular arrival and departure of bin lorries continues, rain or shine, 365 days a year - even during a pandemic. A facility at the centre of this has been the focus of my work for the last two years. South East London Combined Heat and Power (SELCHP) is an incinerator which burns the domestic waste* from five London boroughs. It uses this to generate 35MW of electricity, enough to power 48,000 homes. Residual heat is piped to 2500 homes in Rotherhithe, where it provides central heating.

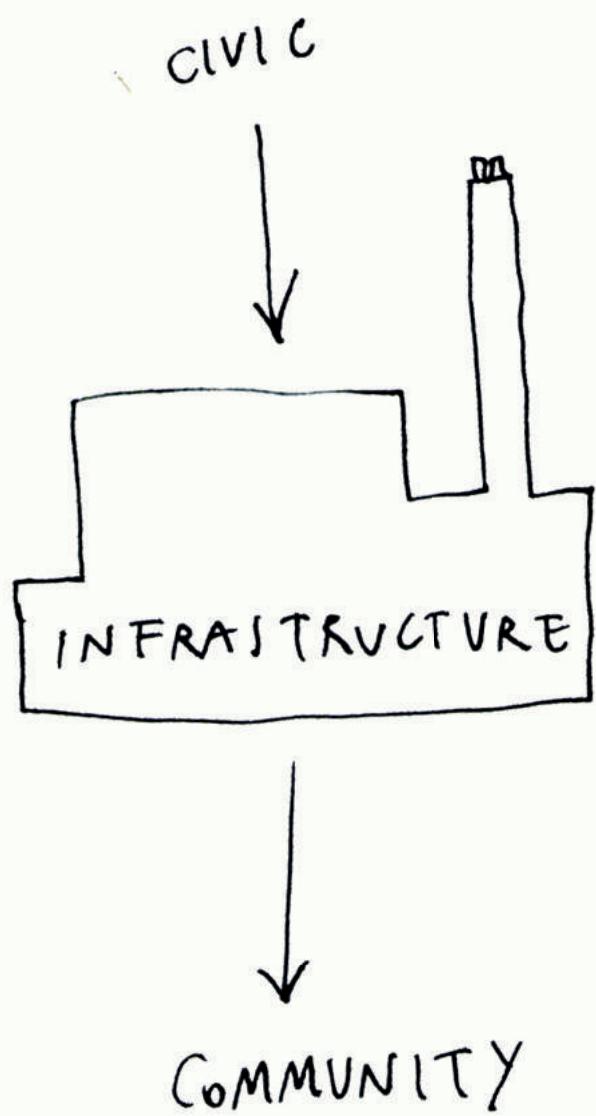
It’s a beautiful building, but probably not a nice one to live next to. In light of the wholesale redevelopment of the area around Surrey Canal

Road, I ask the question what does a Civic Waste Facility look like? Developer renderings of a future vision of the area show a green, pedestrian friendly Surrey Canal Road - choosing to ignore the 600 bin lorries that charge through every day (that’s only the number for SELCHP, there are other facilities too). But having discussed the value of waste in contemporary society, it’s possible to conclude that if done right, it could be rather nice to live next to a waste plant.

Rubbish is a valuable resource, and we as its producers have the right to the potential embedded in it. This means better connecting people to the cycle of its decomposition. The context of Covid-19 highlights the fragility of a system reliant on the global flow of materials. Combined with an immediate response to the climate crisis, it is more relevant than ever to shorten the loop of materials, processing them at a local level. In order to do so, I propose a strategy that stretches over a number of years, and suggests changes that are both behavioural and spatial. As a neighbour, and ultimately the successor to SELCHP, I propose a Civic Waste hub focusing on recycling and food waste, aiming for the disappearance of non-recyclable refuse in the coming years. Looking at more passive treatments of waste - in particular composting and anaerobic digestion, a small-scale power station is born. Excess heat is channeled to a swimming pool and sauna, and liquid fertiliser from the digestion process is used to grow food for the local market. Introducing the human scale into a large piece of infrastructure like a waste facility demystifies the processes taking place within it, but also creates a porous interface - between the new houses sprouting up on one end of Surrey Canal Road - and the industry that will remain further along. Workshops displaced by redevelopment can occupy vacant railways arches, clustering around the power plant as a material ecosystem. The civic waste facility becomes a hub for the area, not only as a central piece of infrastructure, but also a place for culture. Bringing patches of green to gritty South-East London provides space and time for the rituals of reflection and relaxation, things we value now more than ever before.

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1 Sinclair, Iain. London Overground: A Day's Walk around the Ginger Line. UK: Hamish Hamilton, 2015.p.68

*SELCHP is tasked with disposing of Municipal Solid Waste, known as MSW. This is what ends up in your black bin.

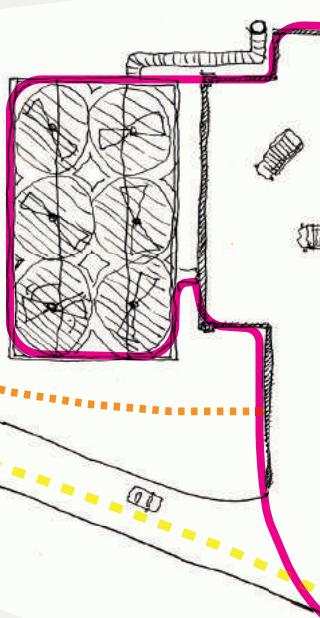




THE LANDSCAPE OF INDUSTRY AND WASTE OF SURREY CANAL ROAD WITH SELCHP AT ITS CENTRE

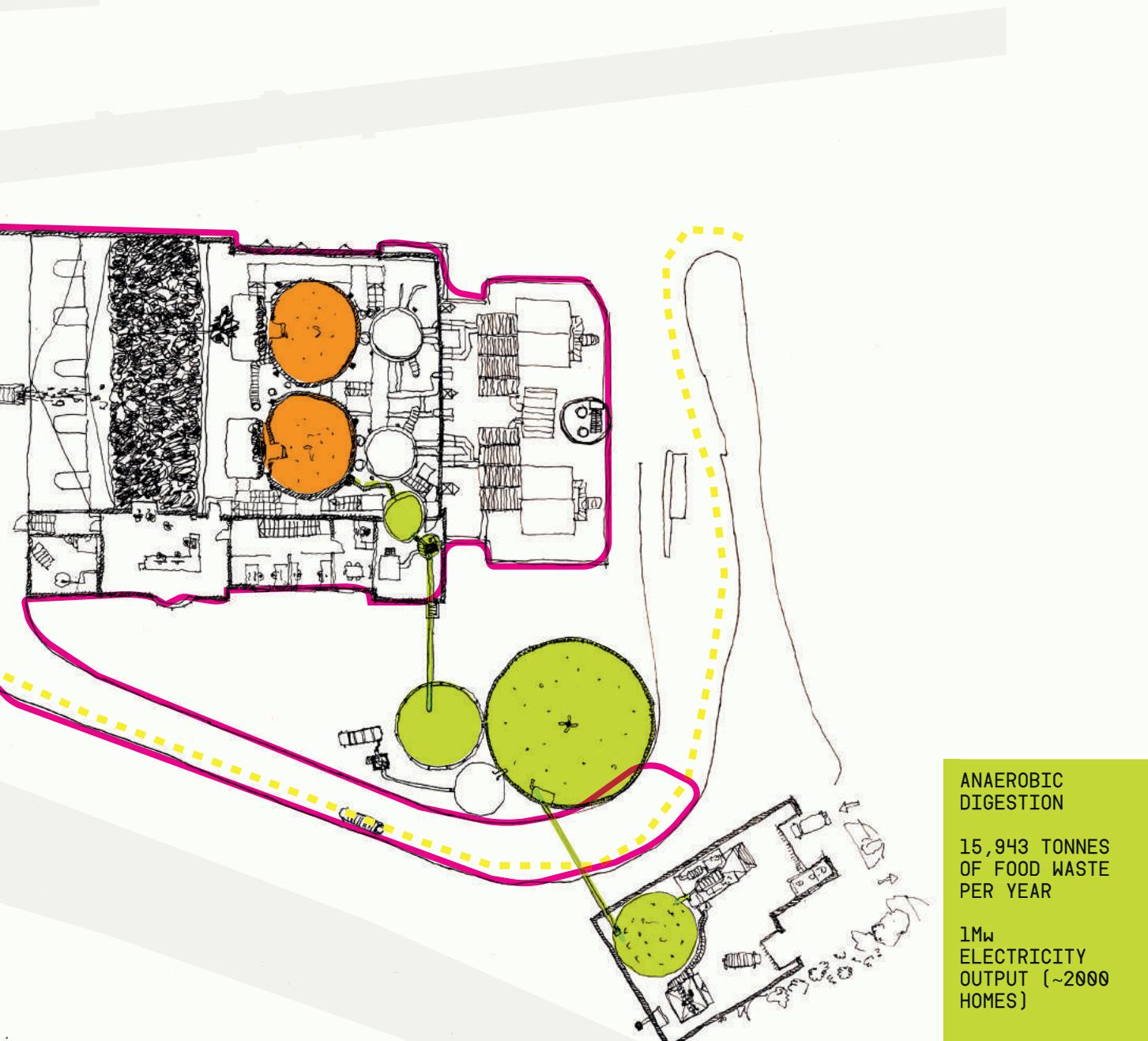


- Lewisham / Southwark border
- Old Kent Road Opportunity Area
- Mixed Use Employment Locations, also Mayor of London Housing Zone
- Strategic Industrial Location
- Industrial areas
- Waste Processing
- Social Housing



AN EXPANDED POWER STATION AS THE FIRST STEP TOWARDS A CIVIC WASTE FACILITY

The bridge to access the power plant is extended and opened to the public. Currently empty railway arches are renovated to accommodate industry relocated from nearby industrial estates. The local tip becomes part of the plant and a place to sort rubbish before disposal. An Anaerobic digester feeds directly into the main furnace. Excess heat and liquid fertiliser are channeled to a pool and garden at the centre of the facility.
(existing outlined in pink)



SYMPOSIUM

During the symposium I outlined the vision described above. I started off with an image that perhaps best illustrates the idea of the 'right to the potential embedded in what we throw away.' It's a photo I took at a political march, of a pile of 'people's vote' protest signs just outside Parliament. It struck me that this was a demonstration of political power - the right of citizens to protest against decisions we see as unjust. But most of all, it was a symbol of potential - later in the day these signs would be collected in a bin lorry and taken to SELCHP, where they'd be burned, transforming the power of protest into the power of electricity. If only we had the same rights to both.

During the symposium I presented three distinct strategies for a Civic Waste Plant. The first is Anaerobic Digestion, described above in some detail. I propose locating a digester adjacent to the power plant, with its biogas output being channeled directly into the existing furnace to generate electricity and heat as is done already. The liquid fertiliser produced would be used locally as part of a growing initiative, located in the awkward slices of land between the railway tracks around Surrey Canal Road. The second strategy is the expansion of SELCHP's district heating network. Currently, the plant only fulfils around a quarter of its potential heating capacity, due to the network's small size. I discussed connecting up new developments in the area to this system, which is very much in consideration. (ref doc from Southwark, email from Renewal). I also suggested extending the network to existing local authority housing in the area, which already has the boiler houses required for this technology. Finally, I mentioned a crucial and easy step to reduce the amount of recyclable material burned in the incinerator, which is to sort waste beforehand. This is done on a large scale at a Southwark Waste Facility very nearby, which would require considerable expansion in order to handle the extra quantities dealt with by SELCHP. This part of the proposal hasn't been explored in too much detail, but I will make sure to address it in the final pieces of work.

I considered the presentation successful, in that a stimulating discussion with some audience members took place afterwards, in fact it continued in the pub later on! I was critiqued on the timidity of my proposals at the time, which was indeed a valid point. I have struggled at times

to wade through the mass of figures and complex policy relating to the treatment of waste, which somewhat blunted what I perceived the scope of the project to be. But the current 'situation' has given everyone an almighty shake-up, and I will ensure to be bold in the coming weeks as I finalise my ideas.



PROTEST BANNERS IN WESTMINSTER



460,000 t

35 MW
40 MW

- 600 MW



calculations about breakdown

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