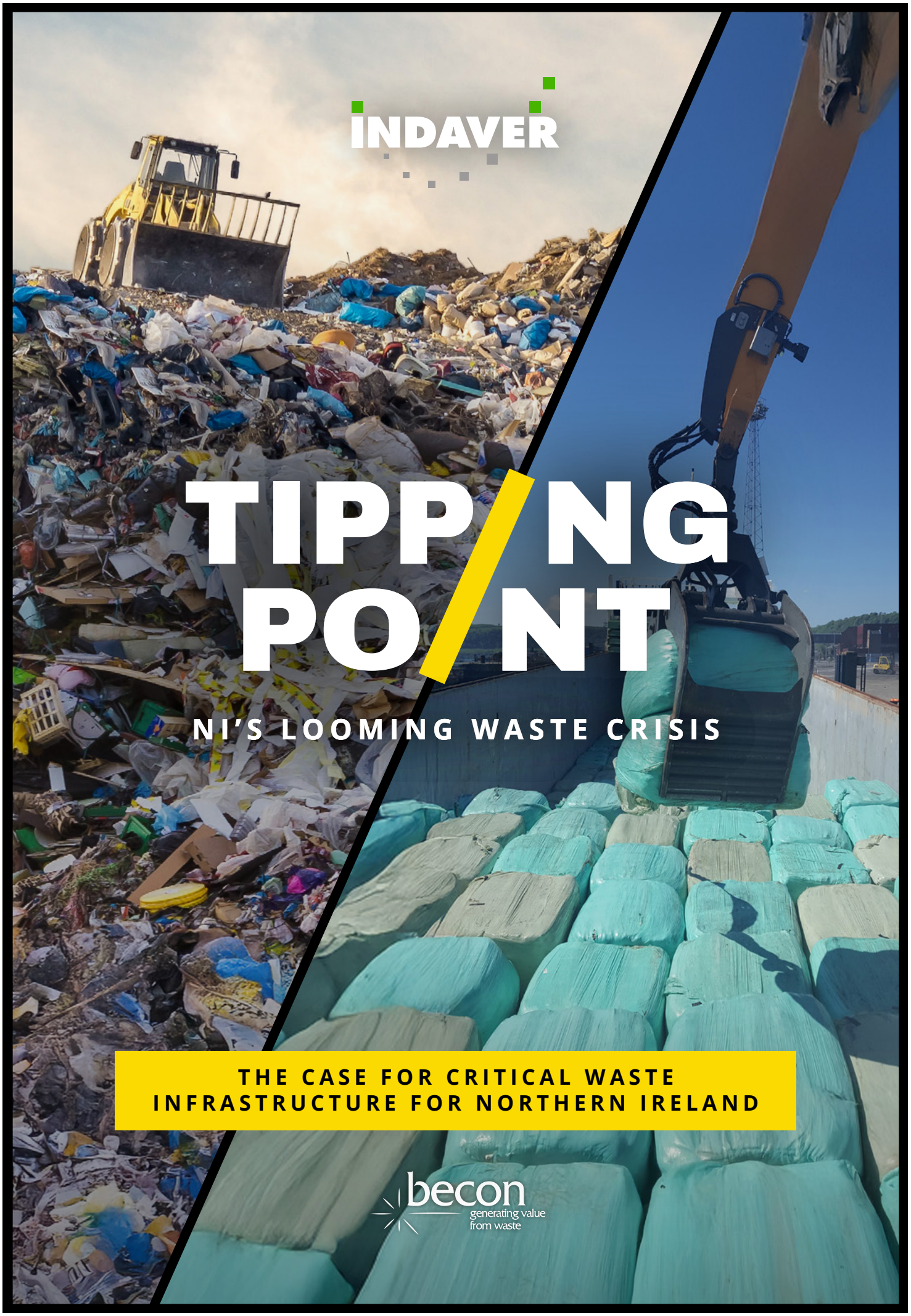

INDAVER
TIPPING POINT
NI'S LOOMING WASTE CRISIS
THE CASE FOR CRITICAL WASTE INFRASTRUCTURE FOR NORTHERN IRELAND
becon
generating value from waste

The Case for Critical Waste Infrastructure for Northern Ireland

As the race to address the climate crisis gathers pace, our approach to dealing with waste must change. We can no longer send all our residual – largely non-recyclable waste to landfill or rely on volatile export markets and expect other jurisdictions to manage our waste. This is not a long term, responsible or sustainable solution especially in these turbulent geo-political times where self-reliance is a strategic imperative.

Waste management systems are already precarious, and the smallest disruption can result in waste piling up in a matter of days, causing significant health and environmental concerns. The impact of recent bin strikes in Edinburgh and more recently Birmingham, where waste quickly piled up on the streets, highlights the potential risk exposure we face.

There is chronic under-capacity in the Northern Ireland waste sector to properly treat residual waste locally and failure to deliver modern, robust and integrated waste infrastructure could easily precipitate a crisis with significant financial, environmental, reputational consequences for NI as place to invest.

Continued inaction means we are nearing a tipping point where we are at serious risk of adding a waste crisis to our existing wastewater crisis. We already know this is severely hampering Northern Ireland's economic ambitions and exacerbating environmental concerns around Lough Neagh and Belfast Lough. We could well do without adding further infrastructure and environmental challenges by ignoring our waste obligations.

Edward Road, Birmingham on 12th March 2025 following a short period of strike action.

Unlike the wastewater crisis, there is a readymade solution:

- **One that supports the aspirations of the new Programme for Government by helping grow a globally competitive and sustainable economy, protecting the environment and supporting decarbonisation targets.**
- **One that offers a bespoke purpose-built solution to meet the needs of six Northen Ireland councils which account for over 60% of Northern Ireland's residual waste.**
- **One that doesn't rely on initial public sector capital investment in these fiscally challenging times, and which provides legal and financial surety to local ratepayers.**
- **One that simply requires a Department for Infrastructure (DfI) Ministerial signature to deliver a robust and evidence-based planning decision. This will allow it to progress to the next stage of procurement where a business case evaluation will trigger a democratic decision by the arc21 councils to decide if it progresses.**

That solution is the £250m arc21 residual waste project, proposed by European waste management experts, Indaver.

The need for critical waste infrastructure is greater than ever and the risks of inaction are growing

The proposed arc21 project is a critical piece of strategic infrastructure. New climate change and circular economy commitments, and associated regulatory changes across the UK and Europe, make the need case even more compelling. They demand a more environmentally, economically sustainable, and responsible approach.

Northern Ireland waste arisings continue to increase in line with predicted population growth. Recycling levels have also plateaued for several years at around 50% because we have captured the low hanging fruit. Even in doing that it is estimated that industry wide between 5 and 10% of that waste stream is rejected due to contamination and unsuitability. This must be disposed of another way – either via landfill or through energy recovery from waste.

There remains a clear need for infrastructure to manage residual waste in a manner which delivers councils' statutory duties, which minimises risks to the environment and public health, and which stimulates local employment and contributes to a local Circular Economy. **This responsibility includes ensuring waste is not piling up on our streets or in our ports which is a clear and present danger in the absence of local modern waste infrastructure.**

There are no sustainable or realistic alternatives. Landfill is ending by design, and remaining capacity is fast running out. That leaves Northern Ireland at the mercy of volatile and increasingly expensive waste export markets which is unsustainable, unreliable, risky and frankly irresponsible, especially in these turbulent geo-political times. Self-reliance is increasingly a strategic imperative. In exporting waste, we are also exporting Gross Value Added (GVA) therefore diminishing the local economy. Ironically this is while we continue to import fossil fuels to meet our local energy needs.

2021 Tolvik Waste Market Report estimates that by 2035 NI will still produce over 500,000 tonnes of residual waste per annum, assuming higher 65% recycling targets are achieved.

Even if the arc21 facility is added to existing infrastructure there will still be 124,000 tonnes annually needing treatment by 2035.

Northern Ireland is an outlier compared to GB, Ireland and Europe where there are hundreds of similar facilities in operation. In the rest of the UK alone there are 60 such facilities operational and 10 under construction. Without our own infrastructure we risk a waste crisis not unlike the one in water/waste wastewater infrastructure. We need to take responsibility for our own waste and seize this opportunity to invest in modern and bespoke integrated waste infrastructure which can deliver many additional benefits to support our economy.

Failure to do so also puts councils, and by extension Northern Ireland, in legal, financial and reputational jeopardy.

The arc21 project need is embedded in agreed waste policy

The Northern Ireland Waste Management Strategy promotes a range of measures designed to minimise waste and maximise recycling. In line with the rest of the UK and Europe we now must view our waste as a valuable resource, and we need to build our own resilient infrastructure solution here rather than risk the volatility of waste export markets.

Until we transition to a truly Circular Economy with no residual waste there will remain significant volumes of waste that cannot be recycled, and we must treat it responsibly and sustainably. The arc21 project will contribute to a circular economy by increasing recycling levels and generating value locally from the remaining non-recyclable waste.

The Strategy supports the need for energy recovery from waste, but it doesn't envisage that it will happen abroad and that it will rely on hundreds of thousands of tonnes of NI waste being shipped across Europe at significant environmental and financial cost every year. The Committee for Climate Change also recommends that Northern Ireland considers the feasibility of phasing out waste exports by 2030.

The current export practice contravenes the important proximity principle of waste management which implies that waste should be managed as near as possible to its place of origin. The carbon footprint of shipping waste abroad via road and sea journeys is naturally significantly higher. The only sustainable and responsible solution is to deliver that same type of infrastructure that is commonplace across the rest of the UK, Ireland and Europe here in Northern Ireland.

In 2023 NI exported over 280,000 tonnes of residual waste as Refuse Derived Fuel (RDF) from ports like Warrenpoint to fuel energy from waste plants across Europe. This figure has more than doubled since 2020 and will continue to rise in the absence of local waste infrastructure. This is a high-risk approach.

The project benefits go way beyond waste management

The potential value and benefits from the arc21 project go far beyond its central and original purpose of sustainable waste management via recycling and energy recovery. Additional benefits now include significant economic and environmental opportunities to support wider decarbonisation and energy transition targets.

It can enable options like hydrogen or e-fuel production or district heating and will be future proofed to deliver carbon capture technologies. In a similar Energy from Waste project in Essex, Indaver is developing the delivery of continuous low carbon heat and electricity to support the agricultural industry through greenhouse production as well as delivering captured carbon to the same producer.

The arc21 project will also support the Department for the Economy's ambition to have 80% renewable electricity on the grid by 2023 by adding to the grid's robustness through the provision of continuous baseload electricity (much of it renewable) which will support further intermittent renewable generation.

The project represents a major inward investment for Northern Ireland. It will see the latest proven technology, currently in operation across GB and Europe, delivered in an integrated modern waste management facility, designed, and sized specially to meet the identified needs of arc21 Councils. With advancements in technology over recent years, the proposed facilities will be even more efficient and effective than originally envisaged.

This solution will increase Northern Ireland's recycling levels and deliver resilience in its management of waste, where we will no longer be at the mercy of volatile waste export markets. It will help reach NI's renewable energy generation target and at the same time reduce greenhouse gas emissions.

Project will divert up to 300,000 tonnes of waste from landfill or export per year, helping meet Circular Economy and Net Zero Carbon Targets

The project will help increase overall recycling rates (up to 10%) through the extraction of plastics, metals, aggregates and other valuable materials

Provide over 50,000 MWh per year towards Northern Ireland's renewable energy targets

The arc21 project will reduce greenhouse gas emissions by approximately 57,500 tonnes CO2-Equivalent per annum compared to landfill

£250m inward investment, approximately 340 permanent direct and indirect jobs and over 450 jobs during construction.

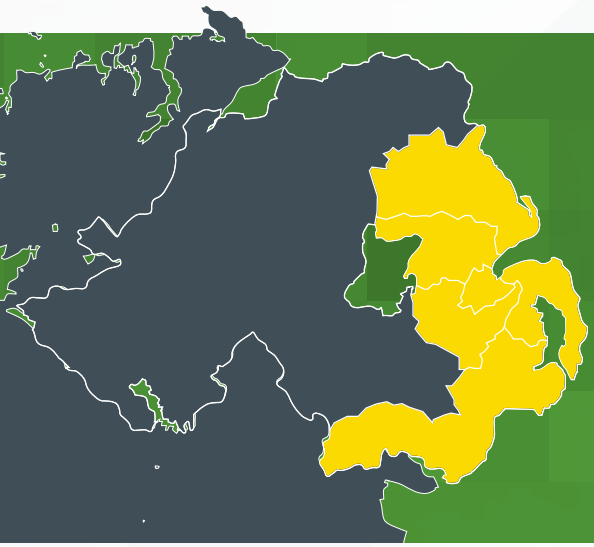
Potential to export 10MW heat to future commercial, industrial or residential users nearby and support wider decarbonisation technologies

Will deliver self-sufficiency in waste management and less reliance on volatile global export markets

With NI landfill capacity fast running out (by design) and no more public landfill sites operational we need a sustainable alternative.

The fact that in these financially contained times we have potential for a quarter of a billion pounds private sector investment in much needed public infrastructure which will result in a publicly owned asset is too good an opportunity to waste.

The arc21 solution is a win win



arc21 region accounts for 60% of the NI population.

They manage 15 million black bins of non-recyclable waste every year

Alongside continuing efforts to reduce, reuse and recycle waste, the six Northern Ireland councils within the arc21 area need to deliver an ambitious infrastructure project to manage our residual waste.

The safe and legally compliant management of waste collected by councils is essential. Failure to do so results risking damage to public health and to the environment. It puts councils in legal and reputational jeopardy.

The project will deliver the necessary infrastructure which firstly maximises recycling levels and then creates a safe and sustainable energy source from the remaining non-recyclable waste.

The arc21 project will redirect the current ratepayer incurred costs for landfill and waste export to a more sustainable long-term solution which will also result in a council owned asset and deliver local economic benefits.

A circular economy cap of 10% on landfill waste and a 21.5% increase in landfill taxes in April 2025 (with further increases ahead) demands a robust solution for our black bin waste.

Next steps

arc21 and Indaver have reviewed their Environmental Impact Assessment to ensure it is robust and up to date and the refreshed planning application has now been resubmitted to the Department for Infrastructure. This will trigger another round of consultation before a recommendation and a planning determination from the DfI Minister is issued.

Achieving a robust and evidence-based planning decision will allow this project to proceed to the next important procurement stage. It is here that arc21 Councils will weigh up the business case and make a democratic decision as to whether the bid and proposed technical solution meets their identified strategic need and should proceed to construction.

The climate change emergency means we can no longer bury our waste or our heads in the ground or export our waste management responsibilities in the long term. The arc21 project will ensure that we take full responsibility for our own waste, manage it in a much more sustainable and resilient way and maximise its value locally instead of exporting that value while relying on volatile export markets.

We are at a tipping point.

There is chronic under-capacity in the local waste sector to properly treat residual waste locally.

Failure to address this gap could easily precipitate a crisis with significant financial, environmental and reputational consequences for the Northern Ireland economy, the local environment and local communities.

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