

# Turning Waste into Power and Possibility



# arc21

arc21 is a local government body made up of six Northern Ireland councils representing 1.1 million people. For the past 20-years we've provided councils with a range of specialised waste services, helping ensure that household waste is collected and treated properly.

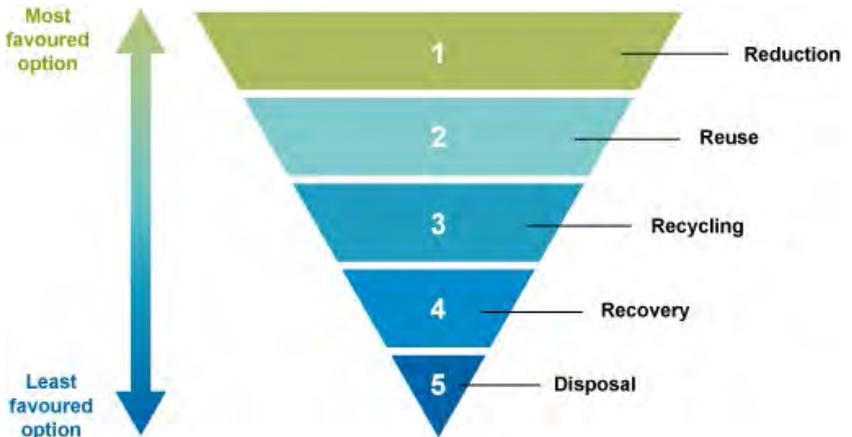
In that time, recycling rates have increased six-fold and we've greatly expanded the range of what we can recycle and/or compost.

Such an approach accelerates our need to stop viewing waste as a problem, but as an opportunity – as a resource which can create green jobs and contribute to addressing the climate crisis.

“ The residual waste treatment project as proposed by arc21 is an essential element of Northern Ireland's Waste Management Plans and a significant economic enabler funded by foreign direct investment”

Grant Thornton, June 2020

arc21's waste management strategy is based on the waste hierarchy



## Stop Burying the Future

At arc21, we're committed to working with our councils to increase our recycling rates to 65% and above by 2035. Unfortunately, that still leaves hundreds of thousands of tonnes of rubbish which can't be recycled. At present we either bury it in the ground as landfill or export it for other countries to extract its value through energy recovery.

Neither option is environmentally or financially sustainable, nor are they resilient to external shocks.

If the UK is to meet its net zero carbon target by 2050, in the next few years, according to the Committee on Climate Change, we need to deliver upon long-term plans to divert all wastes from landfill and phase out waste exports.

We need a new approach to safeguard our councils' waste collection services and start making best use of our rubbish.

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## 15 million reasons to say yes

Every year households in arc21 produce around 15 million black bins' worth of rubbish which can't be recycled. With landfills filling up and export markets either closing or becoming more expensive, where will it go?

## A Catalyst for Change

Without decisions being taken, Northern Ireland's waste infrastructure is falling behind.

We need to develop new waste facilities, similar to those used extensively elsewhere in the UK, Ireland and Europe.

Based in Hightown Quarry on the outskirts of Belfast, close to the main population centres and major road network, arc21 is planning to develop one of the island's largest recycling facilities (an MBT - Mechanical Biological Treatment plant) and Northern Ireland's first Energy plant from Waste (EfW) plant able to process a wide range of processed and unprocessed waste.

There are c.500 EfWs already in use across Europe with a track record of operating safely and reliably. EfWs are power stations that safely burn rubbish instead of oil and gas to produce electricity and heat energy. The MBT helps remove recyclable items from black bin rubbish and prepares the leftover waste as a fuel.



**Turbo-charging infrastructure to deliver cleaner, greener, sustainable and inclusive growth for all".**

Ministerial Advisory Panel on Infrastructure, October 2020

# A Positive Legacy for the Future

Instead of landfilling rubbish or paying to export it overseas (which ultimately means exporting power and jobs), we could put it to good use at home. Benefits from arc21's proposals at Hightown include:

## Environment

### Combat climate change

Divert up to 250,000 tonnes of household waste from landfill every year

Reduce Greenhouse Gas emissions by 57,000 tonnes annually

Contribute over 18 MW annually to Northern Ireland's renewable energy targets

### Increase recycling rates

Reduce our reliance on fossil fuels and potential to produce clean fuels

## Economic

455 jobs during peak construction

c.300 jobs sustained and created when operational

£240m investment by the private sector into a local government owned asset

£25 million of Gross Value Add annually to Northern Ireland's economy

18 MW of electricity to encourage related investment and jobs in the Circular Economy

Scope to develop a 45-acre Northern Ireland Circular Economy Business Park

arc21 is made up of councils in the east of Northern Ireland providing services to 1.1 million people.



“EfW has an important role to play in the transition ahead of us: both as the lowest carbon solution for managing residual waste, but also by providing low carbon heat and supporting other sectors' decarbonisation efforts”



Policy Connect UK cross-party Parliamentary report 'No Time to Waste' July 2020

[www.arc21.org.uk](http://www.arc21.org.uk)

