# Recycling and Waste Topic Overview



**Overview:** The Schools Programme will be led by the North London Waste Authority and partner organisations who have been procured for the construction of the North London Heat and Power Project.

This note provides an overview of the 'Recycling and Waste' session that can be delivered to students in Key Stage 3 to stimulate interest in STEM subjects and careers in the engineering, construction and built environment industry.



**Aim:** To introduce students to the waste and recycling process, understanding what happens to their household waste.

**Description:** Understanding the waste process, exploring what happens to waste (waste materials, product, consumption and disposal/reuse) and the recycling process, including any difficulties of recycling waste.

## Session Content\*:

- Interactive presentation covering the following topics:
  - What happens to waste
  - Recycling and the waste process
  - Difficulties of recycling waste
- Activity session, could be: recycling time challenge, recycling building challenge or fashion show

\*Please note that content and duration of sessions are flexible and can be changed to be suited to what the school would prefer be included. Sessions should be booked at least 2 weeks in advance.

Session Duration: approx. 45 minutes.

**Curriculum Links:** Chemistry (earth as a source of limited resources, the efficacy of recycling, the carbon cycle, production of carbon dioxide and the impact on climate), Geography (use of natural resources)

**Link to relevant Gatsby Benchmarks:** Benchmark 4 (Linking curriculum learning to careers), Benchmark 5 (Encounters with employers and employees)

# **Energy from Waste Topic Overview**



**Overview:** The Schools Programme will be led by the North London Waste Authority and partner organisations who have been procured for the construction of the North London Heat and Power Project.

This note provides an overview of the 'Energy from Waste' session that can be delivered to students in Key Stage 4 or 5 to stimulate interest in STEM subjects and careers in the engineering, construction and built environment industry.



**Aim:** To introduce students to the process of production of energy from waste, including comparisons to other sources of energy, and its environmental and climate benefits.

**Description:** Understanding the process of producing energy from waste, exploring its environmental and climate benefits as well as how the process compares to other sources of energy. This will include an overview of the EcoPark and Energy Recovery Facility being built as part of the North London Heat and Power Project.

## Session Content\*:

- Interactive presentation providing an overview of the EcoPark and Energy Recovery facility, including;
  - Role of the EcoPark including videos of the site and how it will operate
  - Energy from Waste process and it's product
  - Climate and environmental benefits
- Activity session, could be: marshmallow structure, debate

\*Please note that content and duration of sessions are flexible and can be changed to be suited to what the school would prefer be included. Sessions should be booked at least 2 weeks in advance.

Session Duration: approx. 45 minutes.

**Curriculum Links:** Physics (fuel use and costs, fuels and energy resources), Chemistry (the carbon cycle, carbon dioxide and impact on the climate)

**Link to relevant Gatsby Benchmarks:** Benchmark 4 (Linking curriculum learning to careers), Benchmark 5 (Encounters with employers and employees)

## Delivering a Large-Scale Construction Project Topic Overview



**Overview:** The Schools Programme will be led by the North London Waste Authority and partner organisations who have been procured for the construction of the North London Heat and Power Project.

This note provides an overview of the 'Delivering a Large-Scale Construction Project' session that can be delivered to students in Key Stage 3, 4 or 5 to stimulate interest in STEM subjects and careers in the engineering, construction and built environment industry.



**Aim:** To introduce students to the project lifecycle of a major construction project, focusing on the variety of activities involved in a project such as the North London Heat and Power Project.

**Description:** Understanding the process of delivering a large-scale construction project, the stages of the project lifecycle as well as the various professions involved in the delivery.

#### Session Content\*:

- Interactive presentation including:
  - The stages of the project from inception/planning to design and delivery, with real life examples
  - Talking through the models used to design the site
  - Discussion of local community engagement and sustainable construction practices
  - Activity session, could be: structure challenge, egg drop experiment, debate, snakes and ladder game

\*Please note that content and duration of sessions are flexible and can be changed to be suited to what the school would prefer be included. Sessions should be booked at least 2 weeks in advance.

**Session Duration:** approx. 45 minutes.

Curriculum Links: Geography (economic activity across sectors)

**Link to relevant Gatsby Benchmarks:** Benchmark 4 (Linking curriculum learning to careers), Benchmark 5 (Encounters with employers and employees)

## Career Insights Topic Overview



**Overview:** The Schools Programme will be led by the North London Waste Authority and partner organisations who have been procured for the construction of the North London Heat and Power Project.

This note provides an overview of the 'Careers Insights' session that can be delivered to students in Key Stage 3, 4 or 5 to stimulate interest in STEM subjects and careers in the engineering, construction and built environment industry.



**Aim:** To introduce students to the variety of careers opportunities involved in a project of the kind and size of the North London Heat and Power Project within the construction and waste infrastructure sectors.

**Description:** Providing career insights and job application advice to students.

## Session Content\*:

- Interactive presentation on careers insights, to include:
  - Inputs from a range of disciplines and job roles with a variation on the routes into careers
  - Interviews with those working on site across a range of roles, including apprentices
- Careers Fair attendance (an interactive presentation on project roles can also be delivered, with break-out sessions for various technical roles where students can ask questions)
- Site visits (currently being planned to start in early 2023)
- Interactive sessions on job application advice, including CV writing workshops and/or mock interview practice.

\*Please note that content and duration of sessions are flexible and can be changed to be suited to what the school would prefer be included. Sessions should be booked at least 2 weeks in advance.

Session Duration: approx. 45 minutes.

**Curriculum Links:** Chemistry (earth as a source of limited resources, the efficacy of recycling, the carbon cycle, production of carbon dioxide and the impact on climate), Geography (use of natural resources)

**Link to relevant Gatsby Benchmarks:** Benchmark 4 (Linking curriculum learning to careers), Benchmark 5 (Encounters with employers and employees)

For further enquiries and to book a session please contact: info@northlondonheatandpower.london