



cutting through complexity

UK PPP Case Study

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Case Study – Project W2R

Project Background

Project W2R constitutes the design, construction and operation, of a 300,000 tpa Energy from Waste Plant (EfW) to convert residual waste from the Authorities of Staffordshire (lead), Warwickshire, Sandwell and Walsall, primarily into electricity. In addition, Project W2R will export in excess of 23 MW to the National Grid – sufficient to power 32,000 homes.

The project was funded under a Private Finance Initiative (PFI) scheme of which a total of £122.4 million of PFI credit, the largest PFI credit award to date for a waste project in England at the time, was awarded by Central Government's Department of Environment, Food and Rural Affairs (Defra). Veolia Environmental Services (UK) plc was awarded a 25 year PFI residual waste treatment and disposal contract in July 2010.

In developing a procurement strategy for Project W2R, the Staffordshire County has taken into account the key requirements which must be fulfilled for a successful project. These are:

- **Affordability and Best value** – the project has been designed to be both affordable and to deliver best value for money for Staffordshire and its neighbouring authorities.
- **Deliverability** – to avoid significant Landfill Allowance Trading Scheme (LATS) liabilities the W2R facility needs to be fully operational before 2015.
- **Sustainability** – the Authority believes the W2R project should be both environmentally and economically sustainable in the long term.

Achievement

The Authority reached financial close on its project in July 2010, becoming what we believe is the fastest UK waste project to proceed from OJEU to financial close. A truncated Competitive Dialogue (CD) procedure was proposed which combined the PQQ and ISOS stages in order to bring forward the procurement timetable and deliver cost savings for both the public and the private sector. With regards to Joint Working, the Staffordshire Authority facilitated the collaboration with neighbouring authorities who were interested in providing waste in order to deliver the aspiration of a 'sub-regional' facility through our knowledge of the local area and working with the Partners to devise equitable Inter-Authority cost sharing mechanisms.

Case Study – Project W2R

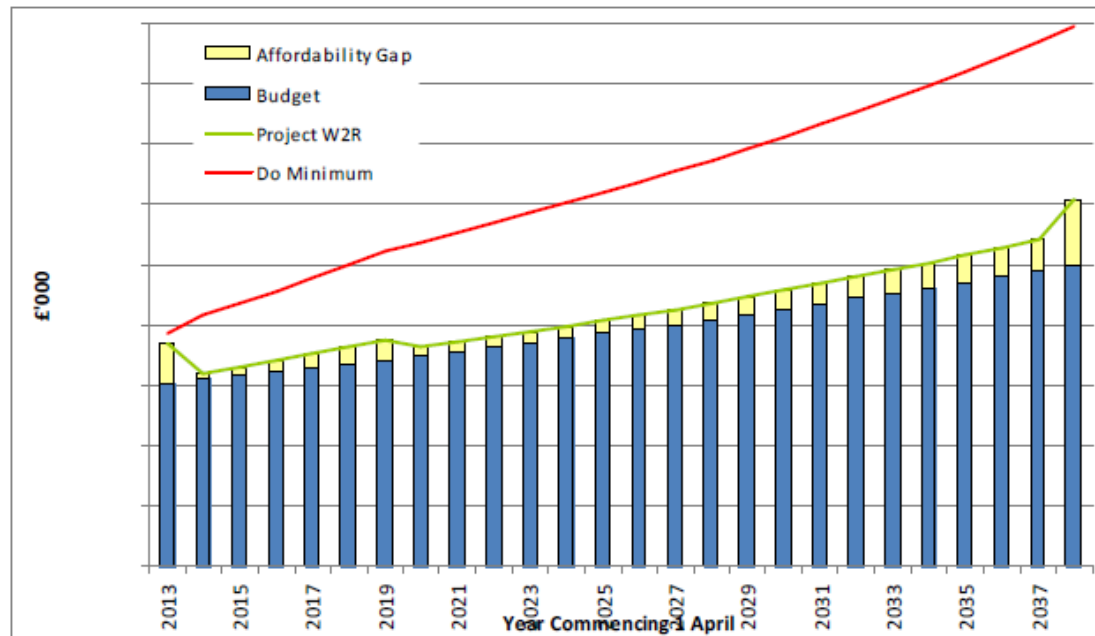
Key considerations for Project W2R:

- **Zero waste to landfill** – Staffordshire believes that it will achieve over 90% diversion of waste from landfill well in advance of 2020 by implementing its "Zero Waste to Landfill" policy through the Project W2R, thus making a major contribution to the nation's landfill diversion targets.
- **Recycling targets** - The UK's recycling and composting targets are set in accordance with the EU Waste Framework Directive, the target being 50% by 2020. A key issue in respect of recycling and composting is the cost associated with achieving incremental recycling. In the context of increasing landfill costs, recycling and composting options are being revisited by a number of Authorities as an alternative to residual waste treatment. Staffordshire Authority anticipated that the recycling and composting rate would raise from 43% in 2008 and 55% of household waste countywide by 2020.
- **The impact of changes in waste volumes** - There has been a move in the English waste market to guarantee a minimum tonnage in waste contracts to allow infrastructure provision to be financed using long term loans from private sector funders. Reductions in waste production, together with the achievement of higher recycling levels have had a significant impact on the quantity of waste expected to be generated in the future. The waste flow modelling undertaken indicated that to achieve the objective of minimum waste to landfill by 2020 a capacity of up about 125,000tpa was required. The Authority recognised, however, that there would be economies of scale that allowed a better value for money solution to be achieved by procuring a larger facility that could provide capacity for neighbouring authorities. As a result of this, the authority has secured firm commitments to import MSW from Walsall, Sandwell and Warwickshire of approximately 55,000tpa, 50,000tpa and 35,000tpa respectively.
- **Joint working arrangements and inter authority issues** - Joint working arrangements are more common in the waste sector due to the size and complexity of projects and the ability to work with neighbouring Authorities to attain the required waste volumes to be guaranteed to achieve economies of scale of the technologies procured and funding. Through joint working, Authorities can deliver an optimal waste solution that meets their individual waste strategies whilst maximising value for money. However, joint working can introduce some complexity into the procurement process and Authorities need to ensure that their decision making processes are aligned to avoid any delays to the delivery of the project. Staffordshire and its neighbours chose to adopt a "contractual" rather than "partnership" style of relationship for the project through an inter authority agreement (IAA)

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- **Project affordability-** Within the current economic climate, the pressure on Authority budgets and the drive to make efficiency savings, project affordability is critical when undertaking waste infrastructure investment projects. This, teamed with reductions in Government support (including PFI credits) and the increase in recycling and composting targets, has meant that Authorities are in the position of re-establishing their affordability position in respect of their waste service and managing the future affordability of their waste service.

Project W2R Affordability

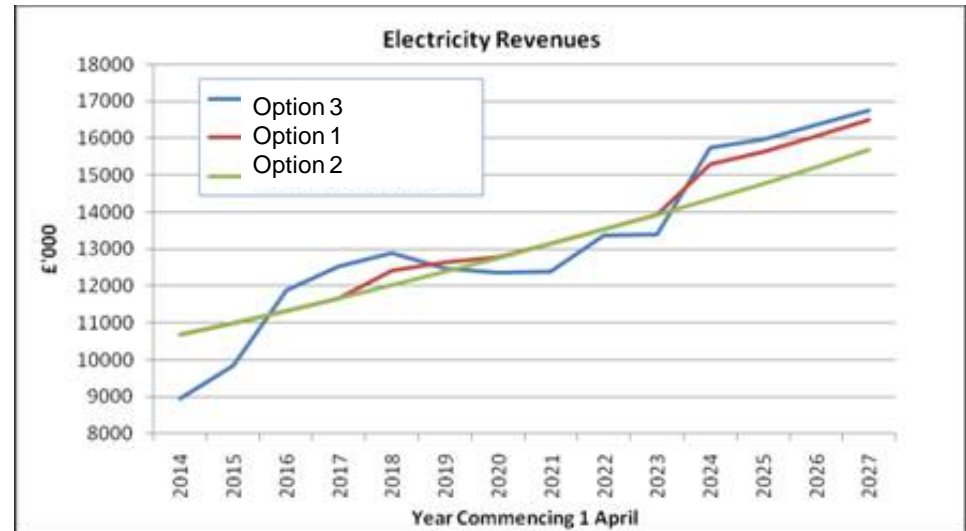


Note:

The cost of the project has been assessed against the cost of continuing to landfill over this period as the “Do Minimum” scenario and which now includes the effect of the recent announcements on the Landfill Tax Escalator which will rise to £80 in 2014.

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- **Technologies appraisal & environmental considerations** – Through the Waste and Resources Assessment Tool for the Environment (WRATE), the Authority had a detailed assessment of the wider environmental implications of the technology that is selected with regard to its desire to reduce carbon and greenhouse gas emissions. The financial implications of these issues must be considered by the Authority to ensure the deliverability of key environmental requirements.
- **Potential advantages** - The authority recognised the potential advantages that enhanced resource recovery processes such as combined heat and power (CHP) and additional recycling from process waste may offer in terms of sustainability. The authority explored the possibilities of the CHP scheme with the prison complex.
- **Tariff risks** – Value for Money (VfM) assessment was carried out by the Authority to determine the parties who is best placed to take the tariff risk for the energy output of Project W2R. Two options were assessed including:
 - **“Standard approach”** refers to the current market approach of seeking a guaranteed electricity price from the bidder plus an upside gain share arrangement for the Authority. Under the Standard approach, the guaranteed electricity revenue is netted off the Unitary Charge paid by the Authority to the SPV.
 - **“Alternative approach”** refers to the Authority retaining full tariff risk, albeit for guaranteed output levels for the facility, on electricity generated by the EfW facility.



Thank you





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