



# Re-use sludge

## Treatment & Re-use of Gasholder Sludge

As well as being the gas emergency and pipeline service for Wales and the south west of England, we are responsible for the environmental condition of sites that were operated by our predecessor companies.

Dealing with waste from demolished gasholders is a key part of that work. We've devised a way of treating it for re-use, while delivering environmental benefits and cost savings.

We have developed a process chain that upcycles hazardous contaminated sludge into a reusable and valuable resource that can be used to backfill old gasholders. The innovative approach we devised has helped us to minimise the impact on the environment, as well as deliver cost savings.

Although most of our gasholders have already been demolished, we developed this process that can not only be used when we work on our few remaining gasholders, but also used by other gas networks in their gasholder demolition programmes.



**YOUR GAS EMERGENCY  
AND PIPELINE SERVICE**



## Key Benefits

- A significant saving in carbon emissions (65% - 57 tonnes CO<sub>2</sub>e) compared with traditional off-site incineration of gasholder sludge.
- The processed sludge can be used to backfill excavated gasholder tanks, reducing the amount of imported aggregate and resulting in lower carbon emissions associated with quarrying activities and fewer lorry movements.
- The successful delivery of this project has brought financial savings of 28% against the traditional methods of managing gasholder sludge waste.

## Next Steps

- As a result of sharing our innovation with other gas networks we estimate that if applied to the remaining UK gasholders this approach would save more than 2000 tonnes CO<sub>2</sub>e (based upon our savings). On this basis, cost savings could be as much as £5.5m.
- Environmental benefit could be increased by gas networks working together to strategically source cement by-pass dust, which is a zero-carbon product of cement manufacture that is not suitable for construction, but when used as an additive to treat contaminated soil/sludge it can remove most carbon emissions from the process.

