

# PAL

determining a fair and credible carbon price

## Fact sheet

## Enhanced Carbon Auditing - ECA

Bespoke audits provide in-depth financial analysis of the real \$/£/€ carbon costs impacting your enterprise to optimise decision-making and reduce costs.

### The PAL Enhanced Carbon Auditing - ECA

Our carbon audit helps you ascertain your present and future *lifetime carbon costs and environmental risk exposure*. We use a bottom up, quantitative approach to measure your cradle to grave carbon emissions footprint and work with you to identify potential cost savings.

#### How it works

- We work with you on a life-cycle analysis to collate an inventory of direct and indirect GHG emissions and carbon embedded in products. Using our unique carbon pricing system we provide you with your carbon costs, environmental risk exposure and overall carbon intensity/risk rating.

#### Why it matters

- To avoid the risk of stranded assets arising from the expected future effects of climate change.

#### What it does

- Identifies unseen costs, aligning your financial proposition with your lifetime carbon footprint, to optimise decision making and to save you money.
- Provides transparency of ongoing risk exposure using our real-time carbon dashboard.

#### Who it's for

- All carbon businesses: Oil & Gas, Industrials, Consumer, Utilities, Transport, Financial Services and Government.

The true value of carbon and other greenhouse gas (GHG) life cycle auditing (LCA) has been hindered by the lack of reliable carbon pricing. LCA studies report their results in terms of tonnes of carbon dioxide equivalent CO<sub>2</sub>(e) *whereas all other audits and accounts are expressed in monetary value*. PAL is now able to bring carbon LCA into the realm of finance through its unique Enhanced Carbon Auditing (ECA) process. This is only possible because PAL has developed an independent and science based carbon pricing system, *PALcarbon*, that is based on the global loss and damage that emissions are causing. It has been calibrated against past damages and can be used to make scientifically based medium and long term projections of carbon losses and carbon prices.

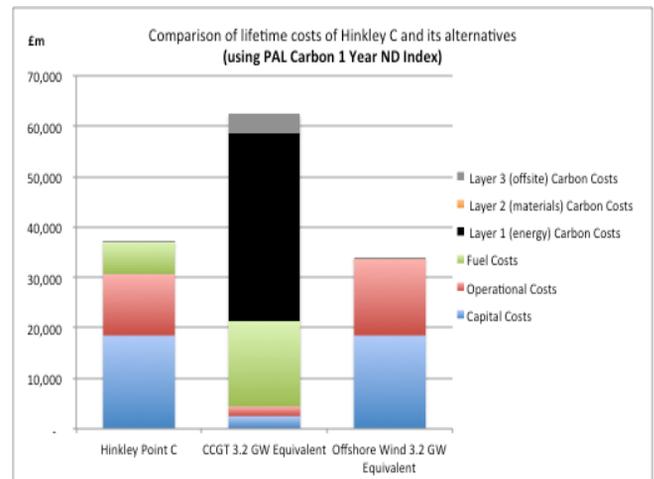


Figure 1 - Comparison of lifetime costs of Hinkley C Nuclear Power Station to Gas and Offshore Wind

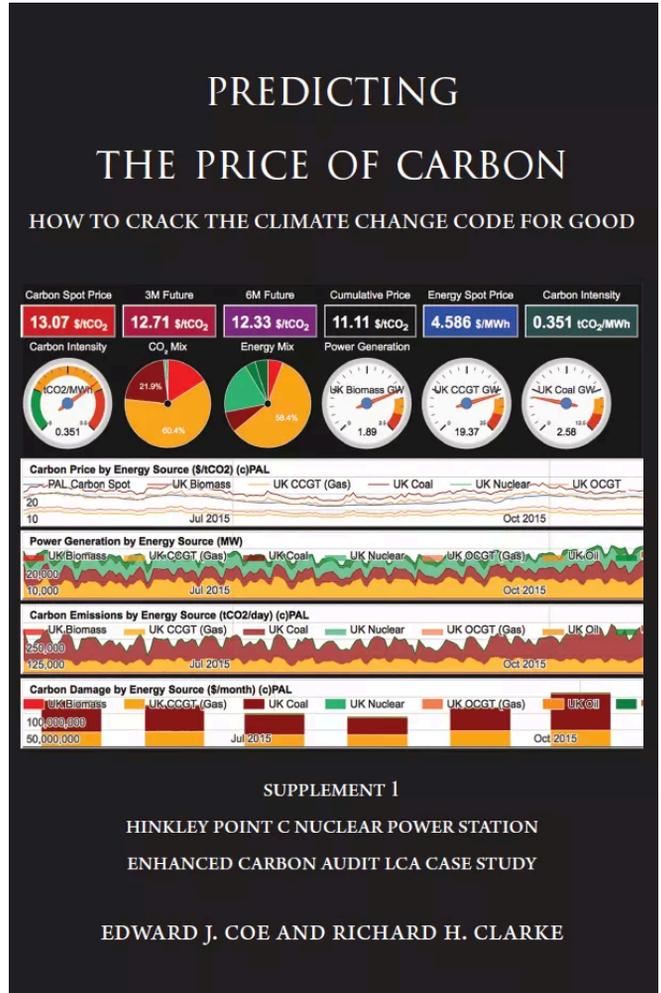
LCA Case Study – Hinkley Point C

In this comprehensive supplement we apply ECA specifically to the proposed Hinkley Point C installation, to determine its individual and time-dynamic carbon rating, directly proportionate to the loss and damage caused throughout each phase of its lifetime: construction, commissioning, operation, refits and decommissioning. We quantify and compare this with an energy-equivalent series of gas-fired power plants, and also with an alternate plan for wind turbine installations equal to the dispatchable output of Hinkley Point C. Furthermore, in graphical format, we pitch PAL's carbon pricing methodology directly against various existing schemes including EU ETS, the US Social Cost of CO<sub>2</sub> (USscCO<sub>2</sub>) and UK Carbon Price Floor.

In summary, PAL's Enhanced Carbon Audit demonstrates that:

- Hinkley Point C's reduced CO<sub>2</sub> emissions – i.e. their consequent loss and damage across the planet – save UK one-third of its estimated lifetime costs, when compared to those of its energy-equivalent gas base load alternatives
- The environmental benefits from Hinkley Point C compared to the gas powered alternative have huge fiscal savings, specifically monetised in this Enhanced Carbon Audit
- Existing carbon-pricing systems fail to account fully for the 'invisible' carbon footprint associated with the manufacture of clean technologies
- PAL's 'carbon intensity weighting' system is the only fair and credible methodology for a full and accurate LCA of Hinkley Point C and its alternatives

The Hinkley Point C Enhanced Carbon Audit LCA Case Study is Supplement 1 to [Predicting the Price of Carbon: How to Crack the Climate Change Code for Good](#).



PAL is committed to supporting the adoption of a universal and transparent carbon price. *PALcarbon* is a real-time carbon pricing and reporting system for clients that takes into account the real cost of damage caused by carbon emissions. *PALgamma* is a computing risk engine for forecasting extreme weather related disaster trends and identifying the impact of man-made climate change. *Predicting the Price of Carbon: How to tackle the climate change code for good* is a recent publication that addresses the goals and strategies for tackling climate change. Find out more at <http://predictability.ltd.uk/>



PAL is a private sector partner of:

