

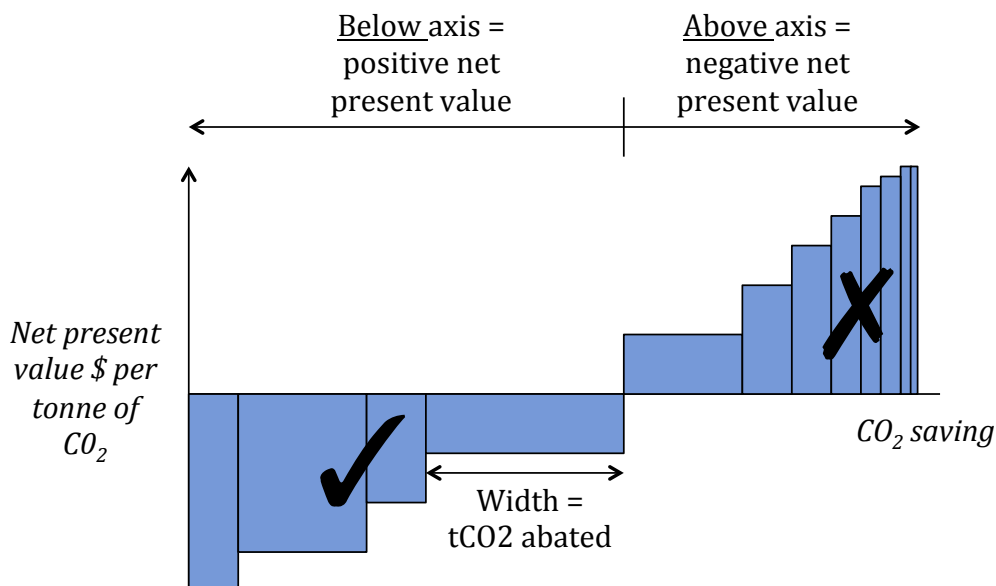
What is a MACC?

A Marginal Abatement Cost Curve (MACC) is a methodology used to express the **economic feasibility** of different carbon abatement projects, based on **Return on Investment (ROI)**. It is a sophisticated analytical tool that was originally developed for Macro (i.e. regional) level that can be applied effectively at an enterprise level; **facility, building or process**.

On a national level, decisions are between renewable power, nuclear power, carbon capture and storage technology, electric cars, residential and commercial energy efficiency drives, etc. At a company level, projects could include efficient manufacturing equipment, low-energy lighting, out-of-hours IT shutdowns, etc.

The methodology ranks various projects or asset management strategies from the **most cost effective** (positive net present value) on the bottom left, to the **least cost effective** (negative net present value) towards the top right, based on the **cost per tonne of carbon abated** against **baseline performance**. The model can be manipulated to measure options for resource management, present data in metrics most relevant to the organisation, and to model the **implications of future scenarios** such as energy price increases or carbon tax introduction.

In order to develop a MAC Curve, an **audit** must be carried out of the existing facility to identify multiple projects. The tool relies on **accurate dis-aggregated performance data** and **comprehensive cost-benefit analysis** of identified projects; the latter may extend beyond Capital Expenditure and Payback into other quantifiable benefits such as increased revenue.



MACCs provide a tool to **validate proposals** for energy, water or waste reduction projects based on their economic viability, and develop **long-term** implementation strategies to **maximize return on investment**.

The GreenAsia Group partners with corporations, manufacturers and hospitality venues in Asia to facilitate sustainability and Corporate Social Responsibility. The goals of such initiatives are energy efficiency, reducing operating costs and strengthening brands – adding value to the triple bottom line, people, profit and planet.

PROVIDE:

- A system for prioritizing projects based on ROI
- Absolute clarity
- Increased uptake of carbon abatement projects
- Risk mitigation
- Scenario modelling
- Validation for energy management programmes