

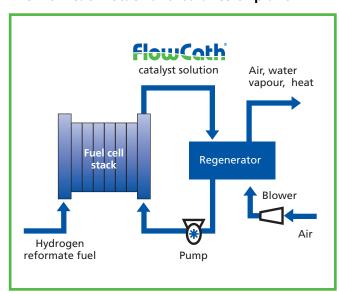
## How FlowCath® works

ACAL Energy's platinum free FlowCath® technology addresses the inherent limitations of conventional PEM fuel cells, by applying a completely novel chemistry based innovation.

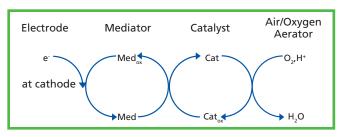
Hydrogen is catalysed on the anode in the conventional fashion. However unlike conventional technology, the electron and proton are absorbed into a solution containing redox catalyst systems, which flow continuously from the stack to an external regeneration vessel.

In the regenerator, the catholyte comes into contact with air and the electron, proton and oxygen from air react to form water, which exits the regenerator as vapor. The catholyte then flows back to the cell.

## The FlowCath® stack and balance of plant



## FlowCath® redox reaction



## FlowCath® half cell and regeneration system

