

How would you like to reduce emissions whilst increasing production and profits...

...Performance Improvements (PI) Ltd can help you achieve this goal by improving the energy efficiency of your onshore and offshore plant operations. This will reduce fuel usage, lower your emissions and reduce your impact on the environment. This in turn will reduce long term operational expenditure and increase production, allowing you to realise increased profit.

Why You Should Act Now

As well as improving production, reducing costs and increasing profits, reducing the level of emissions to the environment will also benefit your organisation in other ways:

Environmental Impact

Environmental legislation is expected to become tougher and the 'Integrated Pollution and Prevention Control' Legislation about to be introduced by the Government seeks to impose emission restrictions on both onshore and offshore plant.

This legislation follows in the footsteps of the Kyoto Protocol which emerged from Japan in December '97 when representatives from over 150 nations convened to agree an international, legally binding treaty to establish limitations on the emissions of greenhouse gases. The final protocol calls on 38 industrialised nations, which emit most of the gases, to cut their greenhouse gas emissions by an average of 5.2 percent below the 1990 benchmark levels by the year 2010.

By acting now, you will be compliant with future legislation ahead of its introduction and this will present your organisation as a leader in its sector.

Reputation Management

With corporate identity and reputation representing a hugely important asset to any organisation, it is imperative that positive action is taken to reduce the impact made on the environment. Care for the environment provides great returns in the form of corporate image and public relations and is an increasing focus for any forward thinking organisation.



Tomorrow's solutions today.

www.pi-ltd.com

How we can help you become cleaner, greener and more efficient...

...Performance Improvements offers a comprehensive, multi-faceted service which draws on the skill and expertise of a highly motivated team of engineers. We specialise in reducing emissions across a wide range of market sectors and operations including oil and gas production, processing and transportation. The Best Available Techniques (BAT) that we employ are unique to any organisation.

Examples of Emission Reductions

Our proven expertise is demonstrated in the table below which shows details of particular case studies across five separate installations.

Some particular areas of expertise include:

- IPPC Legislation Awareness
- Energy/Emissions Audits
- Compressor and gas turbine optimisation
- Process modifications and debottlenecking
- Process control/plant tuning
- Maintenance and operations practices
- Alarm handling and expert systems
- Training and hands-on coaching

Offshore Platform	Onshore Gas/Oil Processing	Offshore Platform	Offshore FPSO	Onshore Gas Terminal
<ul style="list-style-type: none"> • Random trip on turbine unresolved for 5 years • Required running standby 	<ul style="list-style-type: none"> • Difficulty in stabilising compressor • Excessive flaring 	<ul style="list-style-type: none"> • Major compressor fouling problem • Reduced throughput 	<ul style="list-style-type: none"> • Major flaring problem approaching consent limits • Poor uptime 	<ul style="list-style-type: none"> • Inability to optimise throughput
<p>Input was:-</p> <ul style="list-style-type: none"> • Identified root cause of problem (controls/software fault) 	<p>Input was:-</p> <ul style="list-style-type: none"> • Reconfigured compressor controls • Retuned controllers • Modified stabiliser controls 	<p>Input was:-</p> <ul style="list-style-type: none"> • Method to reduce fouling • Reduced pressure losses in system • Debottlenecking of system • Increased separation efficiency 	<p>Input was:-</p> <ul style="list-style-type: none"> • Redesign of key pressure control loops 	<p>Input was:-</p> <ul style="list-style-type: none"> • Implemented advanced control scheme to enable automatic optimisation of compressors
<p>Benefits:-</p> <ul style="list-style-type: none"> • Annual savings in excess of £400k • CO₂ savings in excess of 6000 tonnes per year 	<p>Benefits:-</p> <ul style="list-style-type: none"> • Automatic load sharing of compressors • Reduced flare by 3MM scf/d • Increased throughput by 20,000 bop/d 	<p>Benefits:-</p> <ul style="list-style-type: none"> • 10% increase in production • Platform abandoned one year early • CO₂ savings in excess of 24,000 tonnes 	<p>Benefits:-</p> <ul style="list-style-type: none"> • Flaring eliminated saving 10 mmscf/d • Increased uptime significantly • Increase in operator confidence 	<p>Benefits:-</p> <ul style="list-style-type: none"> • Compressors optimised for emissions reduction • Over 10,000 tonnes in CO₂ saved per year • Fuel savings of £250K per year

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Smart team, big results, fast!

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