

EU-GCC

Energy Efficiency Benchmarking and Improvement Opportunities in Oil & Gas Processing

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شركة تنمية نفط عُمان
Petroleum Development Oman

PDO Energy Management Strategy

Governing document

Corporate Energy Management Strategy

REDUCE
(Energy Conservation)

REPLACE
(Energy Efficiency)

RENEW
(Renewable Energy)

Flaring

Power Generation

Power Consumption

Fuel Gas Utilization

Renewable Energy

Value Generated



People (ICV, Job opportunities, develop expertise)

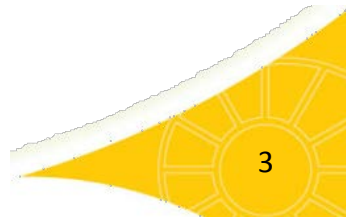
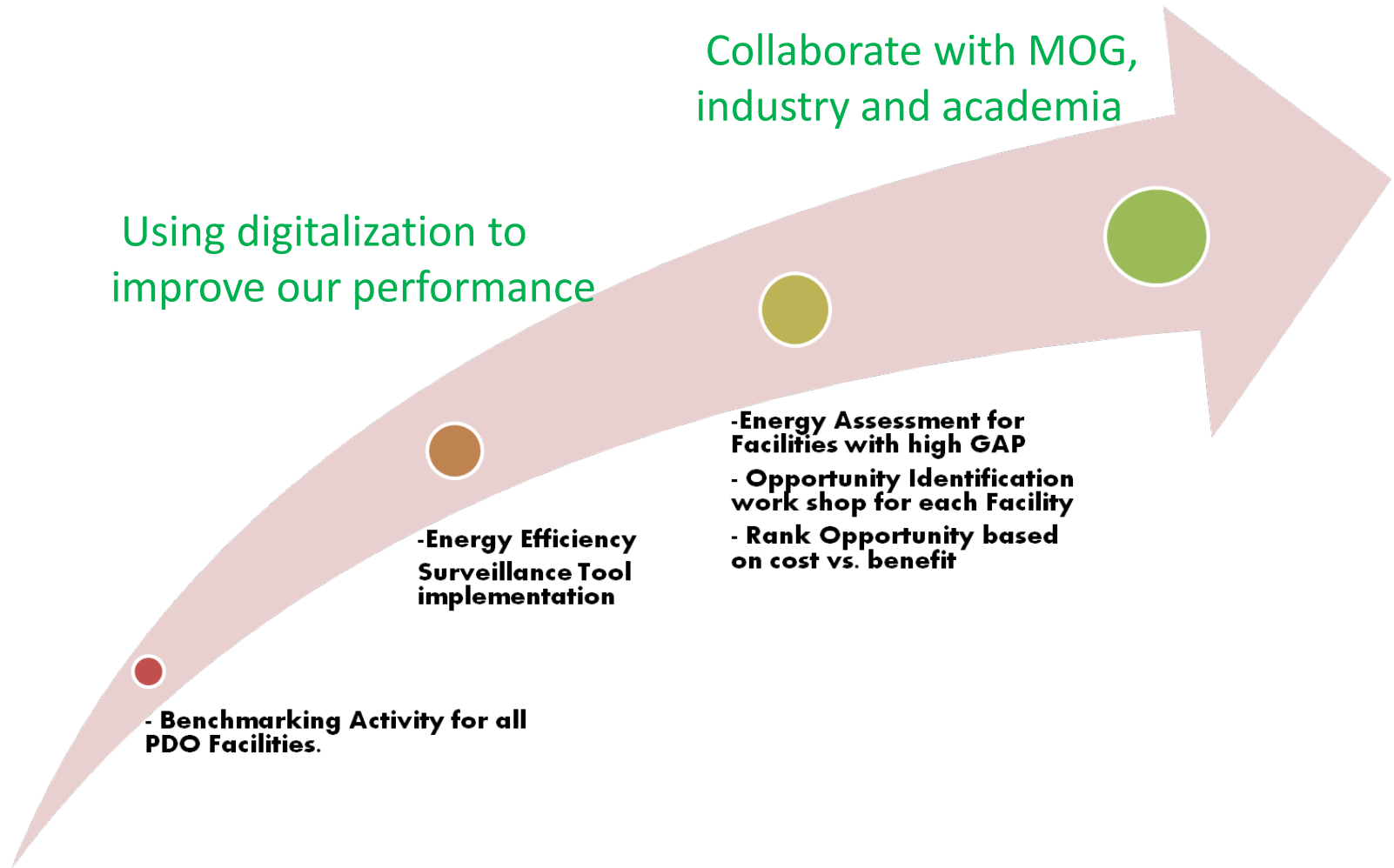


Economics (Recovery of lost gas and value of power exported)



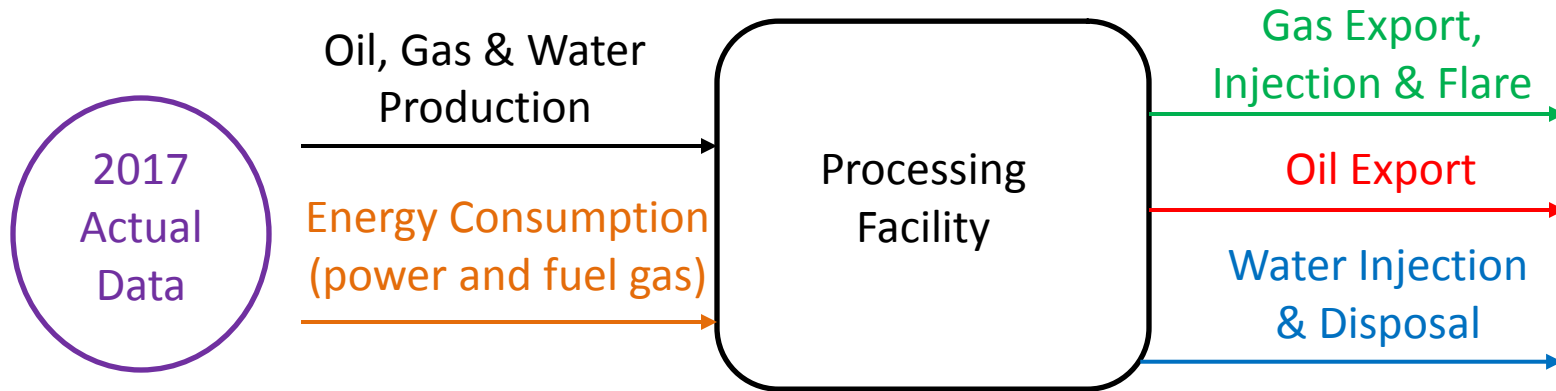
Environment (Minimizing environmental impact)

Energy Improvement Road Map



Energy Benchmarking Approach

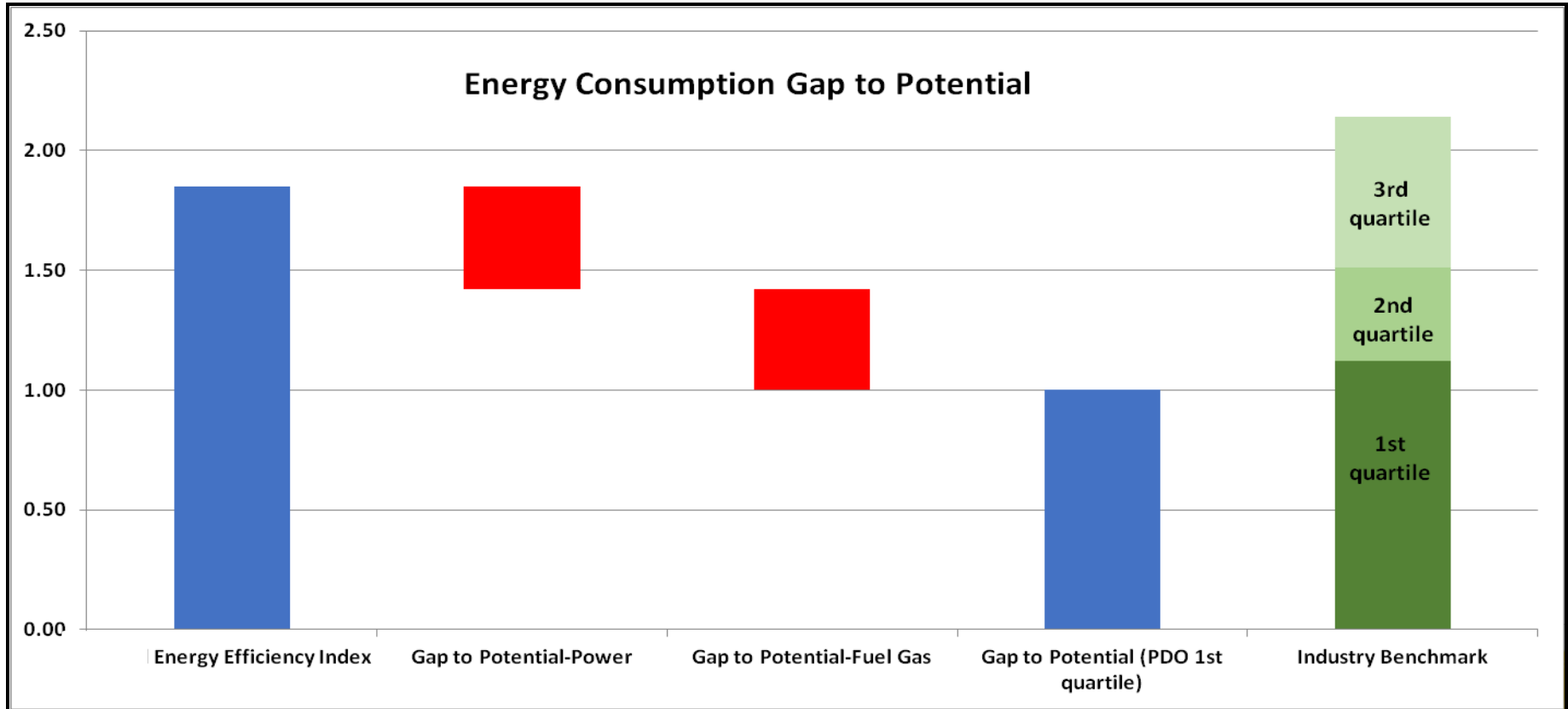
- The Energy Benchmarking Tool has a database of on-shore and off-shore oil and gas facilities



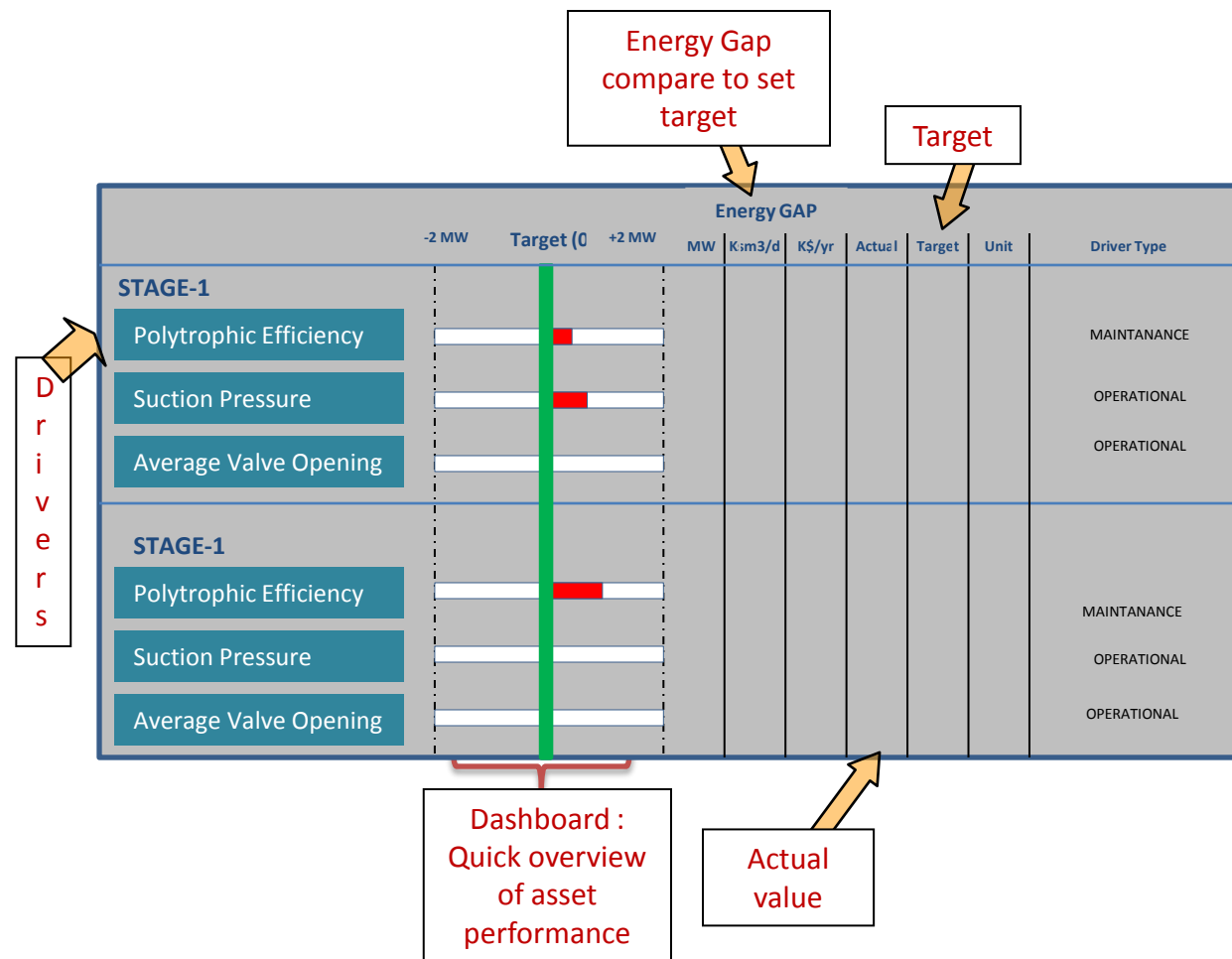
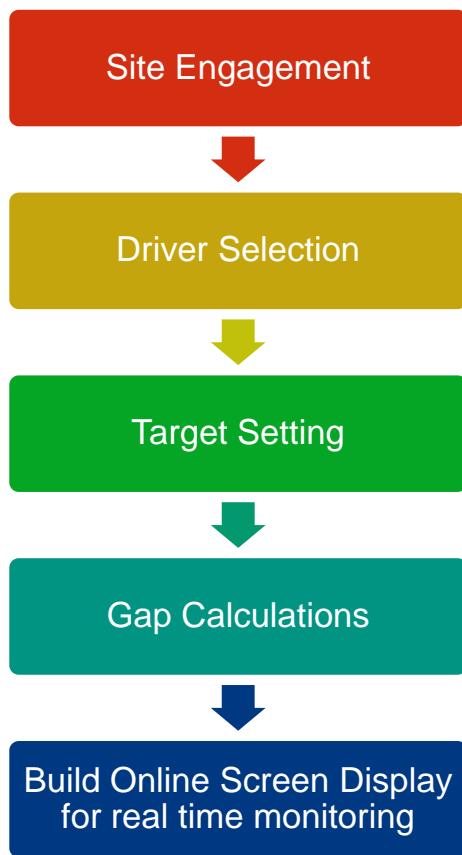
- Compares actual performance to a reference performance by providing an energy allowance for activities such as compression, pumping, sweetening in a facility and determines Energy Efficiency Index
- Based on inherent energy requirement for the process, so normalises for pressures, water cut, GOR, etc

Energy Gap to Potential

- Identify the Energy Gap for all facility and use this to prioritise the focus areas
- Breakdown the energy gaps by fuel type and energy consumer
- Based on the priorities, do detailed energy efficiency assessments

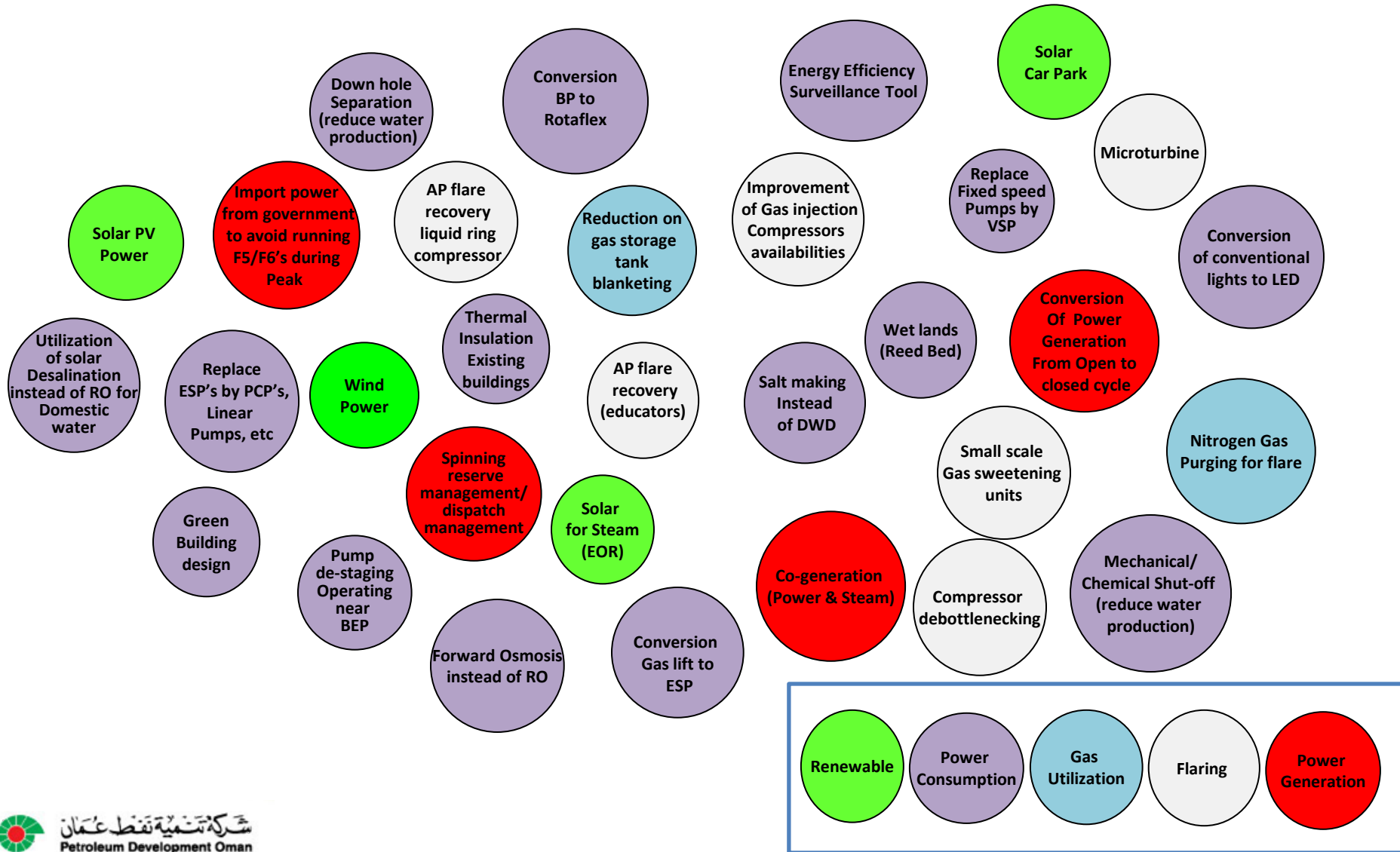


Energy Efficiency Surveillance Tool



Improvement Opportunities

Identify improvement opportunities (operational, field changes, or capital investments)



Summary

- Energy management can **generate great value for Oman** in the areas of People, Economics and Environment
- Define the key themes for the energy management strategy and roles and responsibilities
- Do **benchmarking** to understand the facility performance
- Prioritise the focus areas based on benchmarking
- Do detailed analysis to quantify the gaps
- Identify short, medium and long term improvements to close the gaps
- Set KPI's to monitor improvements – **visibility is critical**

Questions and Answers



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