Organization Details:

Organization Name	PORT OF SALALAH
Organization Type (Business/NGO/Gov)	BUSINESS
Website	www.salalahport.com
Location /Address	PO Box 105, PC 118, SHATTI AL QURUM, AL JAWHARAH BUILDING, FIRST FLOOR, MUSCAT, SULTANTE OF OMAN

Award Category GREEN FOOTPRINT

Project Details:

Project Title	Project Qudam – Environmental Performance Improvement
Location of Project	Port of Salalah
One Line Description of Project	To undertake various environmental initiatives that would reduce the carbon footprint of the Port of Salalah operations

Effectiveness

What were your goals?

To make Port of Salalah a "Green Port" and to achieve:
1) Reduction of carbon emission by 15% by 31 December 2010 and
2) 25% reduction by the end of year 2014 with respect to the baseline year 2009.

How have you measured your success?

A structured approach of identifying the sources of green house gases emission was undertaken. Key equipments and operation contributing to the significant portion of GHG emissions were identified. Subsequently, potential opportunities were identified to reduce/replace technology and processes .These initiatives were taken up in a consolidate manner to the top management' Project Qudam' in 2009 for approval . Going forward, in 2010, independent expertise of Ernst and Young was hired to further assess the carbon footprint of the Port using internationally acknowledged best practices.

Innovation & Creativity

How were innovative methods, strategies or ideas applied?

As we are a transshipment handling port, our major contribution to the environment would be in energy consumption. To decrease our carbon footprint, we needed to reduce our energy consumption. Our strategy comprised of

‘REDUCE’ and ‘REPLACE’. Some of the unique ideas that we have implemented at Port of Salalah are:

- REDUCE (TECHNOLOGY)- In normal Rolling Terminal Gantry (RTG) operations, the engine speed at all times is close to the operational requirement of handling a container which is not required when the RTG is idling (waiting to handle a container), as the only power required is to run electronics and air-conditioning/heating units in the operator cabin which is significantly lower than that generated by the engine at normal operating speed. This would be reduced by the installation of 3rd party parts: G-PAC, Emerson’s RISGA or Shutdown system

- REDUCE (PROCESS IMPROVEMENT) - Modifying the Air Conditioner regulation of Quay Cranes so that whenever the quay crane becomes idle, the air condition units will automatically switch off till the room temperature reaches 30 deg C instead of 22 deg C while in operation.

- REDUCE (TECHNOLOGY) - Fuel saving by installing shut off system in the yard tractors. This system will shut off the engine of the tractor if it is left idling for more than twelve minutes, thus reducing the fuel consumption.

- REPLACE (TECHNOLOGY)-Reduction of the actual terminal lighting to meeting standard by replacing the High Pressure Sodium bulbs with Prismalences/ Samudra LED solid state high mast light - consuming 50 to 75% less power.

- REDUCE (PROCESS IMPROVEMENT)-Reduction in fuel consumption by tug boats. Each tug consumes between 100 and 220 litres of diesel per hour. A delay of 15 minutes with 2 tugs standby results in burning of an average 80 litres of diesel in one shipping movement itself. By reducing the time the tug boats wait for the vessel, the fuel consumption could be reduced.

- REDUCE (TECHNOLOGY) Installation of auto switch off system for the flood lights of quay cranes so that whenever the crane is in idle state the flood lights are automatically put out resulting in huge power savings.

- REDUCE (PROCESS IMPROVEMENT) - Last but not the least is planting trees around the perimeter of our compound would help absorbing carbon di-oxide from the atmosphere.

Impact

How has the project/initiative/work motivated others to contribute to a greener Oman

The initiative to go green by Port of Salalah has drawn interest with other ports in the region to embark on such initiatives – considering the fact that Port of Salalah is the first amongst the few in the world and the first in middle east to do so. These will result in tremendous amount of GHG savings over the years. In addition, the entire initiative serves as an enormous source of awareness and motivation for various stakeholders. For Example, after the launch of the Project Qudam, the employees of the Port of Salalah have taken the energy conservation attitude to back home and are implementing energy efficiency measures both at work and at home. Though individually they may be small, but on a collective basis all this would result in a significant saving in the energy demand of Oman and contribute to its sustainable development.

Originality and Leadership

How has the nominee demonstrated vision, foresight and persistence?

The vision of Port of Salalah ia amply demonstrated by the fact that this was an initiative which was voluntarily started by the management – the first of its kind in Ports and the transport sector in the region (middle east).To further strengthen this process, the entire carbon footprinting exercise is being carried out by the expertise of independent external consultants following international protocols and guidelines.

Continuity & Sustainability

How sustainable is the initiative carried out?

Sustainability is the crux of the Project Qudam. The initiatives undertaken under this project have a payback of less than 3 years which ensures that these projects are implemented and managed properly. These initiatives have been approved by the top management of Port of Salalah. Apart from reduction in the carbon footprint of the port, these initiatives also result in saving fossil fuel which contribute to the GDP of the nation. The Port of Salalah is also planning to take up a few of these projects under the Clean Development Mechanism of United Nations Framework for Convention on Climate Change (UNFCCC). If registered, it would be the first project from Oman to get certified emission reductions.

Explain how it will be effective in the long term

In the long term, these initiatives lead to significant emission reductions over time. These initiatives are not a one off phenomenon but a process of continuous evolution to provide the same or better services with a lesser environmental footprint. Under the Project Qudam, several new initiatives would be launched that would reduce the Port of Salalah's emissions and make it a leader among the Green Ports of the world. This will also trigger the other industries and ports in Oman and adjoining countries to follow the sustainable path set forth by the Port of Salalah.