

ENHANCING SOCIETY TOGETHER

*Briefing Note for Dutch Sustainability Group
Middle East*

31 December 2019

Company Overview



KEY PROFILE	TOP INTERNATIONAL DESIGN FIRM	BUSINESS LINES	CERTIFICATIONS
<ul style="list-style-type: none"> Established in 1881 5 800 employees Turnover EUR 614 million in 2018 	<p>Number 2 International Design Firms - Marine and Port Facilities by ENR in 2019</p>  <p>2nd in ENR Global Sourcebook Marine and Port Facilities - 2019</p>	<ul style="list-style-type: none"> Maritime & Aviation Transport & Planning Industry & Buildings Water 	<ul style="list-style-type: none"> ISO 9001 ISO 14001 ISO 45001 CSR Gold Label 

Our Approach to Responsible and Sustainability Business

Our definition	Responsible & Sustainable Business: integrated programs that embed, action and measure the positive role a company needs to play in society, supporting an healthy environment and prosperous economy.
Our ambition	Our ambition is to run a financially healthy business by putting our collective intelligence into practice with clients and partners to have a positive impact on people, our living environment and the economy. We drive inclusive sustainable development with our clients in areas that we master and can actively influence. Our purpose is to Enhance Society Together. This is also reflected in our company strategy and how we use innovations, technology and digitisation.
The process	To embed Enhancing Society Together and our contribution to the SDGs in our daily practice, we use 4 Questions. These questions guide our conversations with clients and partners to determine our added value for society, whether it is in our own operations or through our projects: <ol style="list-style-type: none"> 1. Does the output meet the requirements of most stakeholders involved? 2. Does the output serve added value for the client and society as a whole? 3. Is the result lasting, thus is it future proof? 4. Can we meet the client's demand while minimising the use of natural resources and energy?

2 Impact Categories

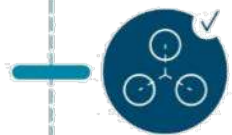


Operations



Products / Services

4 Questions



Requirements of stakeholders



Added value to client and society

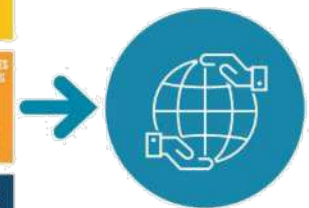


Future proof



Resources and energy

SUSTAINABLE DEVELOPMENT GOALS



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Selection of Maritime Project Examples



UAE – AD Ports Green Ports Assessment

- **Energy and resource efficiency:**
 - Options for emissions and waste reduction (a.o. through electrification and behavior change)
 - Provide options for operational optimization
 - Green ports policy formulation



PD Teesport (Newcastle UK) – Heavy Duty Quay Wall Design

- **Added value to client and society:** supporting imports for a renewable energy plant
- **Energy and resource efficiency:**
 - Reuse of 50,000t waste in new facilities
 - Cold-ironing for vessel power supply when in port



Tanzania Ports Authority – Green Ports Strategy

- **Energy and resource efficiency:**
 - “Green Port” aspects include amongst others: environmental management, energy efficiency, waste management, oil spill response, social aspects, stakeholder involvement and efficient connectivity
 - Strategy and policy to move towards ISO14001 accreditation



Oman - Commercialisation of Small and Medium Ports

- **Requirements of stakeholders:** planning and function aligned to regional planning directives
- **Added value to client and society:** reduction in logistics costs, regional development opportunities
- **Energy and resource efficiency:** maximise use of existing and planned infrastructure, no unnecessary competition

Selection of Aviation Project Examples



Kuwait International Airport - Storm Water Harvesting and Re-Use

- **Energy and resource efficiency:** Storm water harvesting integral part of drainage design.
 - Estimated that some 250,000 cubic meters of water may be captured each year. Results in a significant reduction of fresh water required for landscape irrigation, and other purposes.
- **Added value to client and society:** decrease in financial cost related to airport operations.



Civil Aviation Authority Singapore - Climate Change Resilience at Singapore's civilian airports

- **Requirements of stakeholders:** The Civil Aviation Authority of Singapore recognises that climate change poses potential challenges for airport assets and requires coordinated action.
- **Future proof:** Supporting whole-of-government adaptation pathway
 - Identified airport assets at risk from the climate change effects.
 - Development of appropriate resilience and adaptation measures for the near to medium term.



New Mexico International Airport – Re-use of Pavement Material

- **Energy and resource efficiency:** Pavement design resulted in around 250,000 fewer truckloads of basalt to be removed from the site.
- **Added value to client and society:** The reduction in capital expenditure required was around 100 million USD to the benefit of the Client. Significant reduction of construction-related traffic, reducing the impact of the project on surrounding communities.



Amsterdam Airport Schiphol – Geometric design of Apron Electrification

- **Requirements of stakeholders:** Significantly decrease emissions of CO₂, NO_x and particle
- **Energy and resource efficiency:** 73 of the 127 fixed aircraft parking positions are equipped with a fixed power supply (400hz) and an electrical pre-conditioned air (PCA) unit.
- **Added value to client and society:** Significant decrease in emissions of CO₂, NO_x, particles and noise on the aircraft apron, and therefore better working conditions for ground crew.