## Hydrographic Surveying and the Carbon Footprint of Data – Can we establish Sustainable Surveying?

## **Gordon Johnston (United Kingdom)**

**Key words:** Capacity building; Hydrography; Professional practice; Risk management; Spatial

planning; Standards; Carbon footprint, Sustainable, data

## **SUMMARY**

The UN-SDGs provide society with common goals and during the UN Decade of the Ocean the ten challenges cover topics that often rely upon improved data and digital technologies. This focus on data puts the surveyors and scientists at the forefront of the activities and projects to improve our understanding and to enable informed decisions to be made. However, data does not come cheap when associated with the, often harsh, marine and ocean environments. So whilst technologies and techniques improve and data volumes increase exponentially, how do we as surveyors represent our actions and behaviours in the context of Green House Gas (GHG) emissions, and in particular the Carbon Footprint associated with our projects. Is our surveying a sustainable process?

Currently this is often a question that is being asked by governments to large corporations who are increasingly being required to report embedded carbon and the carbon footprint of their infrastructure. Offshore wind and renewable energies, traditional hydrocarbon related activity and many other infrastructure projects will require good data sets to commence the engineering design and to monitor and manage the engineering lifecycle of the assets. How should we express our impact on the world in terms of our Carbon Footprint and can we develop methods and techniques that can offer sustainable data solutions?

This presentation sets out to develop these ideas and concepts and to offer some thoughts on potential activities and practices for surveyors.

Hydrographic Surveying and the Carbon Footprint of Data – Can we establish Sustainable Surveying? (12482) Gordon Johnston (United Kingdom)