Joining forces towards sustainable engineering

Wetlands International and Boskalis joining hands towards enhancing sustainability in coastal and water infrastructure development

In 2020 Wetlands International and Boskalis signed an institutional partnership aimed at enhancing sustainability of marine contracting and hydraulic engineering and contribute to climate resilient development. A major ambition of the collaboration is to promote Building with Nature, an integrated engineering approach that combines grey and green solutions (see the next page). It has been found that Building with Nature solutions yield design solutions that are ecologically, socially and economically more sustainable, against lower cost compared to conventional design solutions.

Within the framework of the Existing Building with Nature innovation programme coordinated by Ecoshape both organisations have worked to demonstrate and promote the Building with Nature approach in various countries, including Indonesia.

Building with Nature in Asia
As part of a network of international public and private organisations we are now developing Building with Nature Asia. This is a groundbreaking 10-year initiative that promotes the large-scale adoption of nature-based solutions across Asia, focusing on both rural and urban environments. With governmental partners from five target countries, we are developing dedicated national programmes as well as regional thematic work packages on science, policy, communications and capacity building. The initiative addresses barriers to adoption of nature-based solutions and stimulates multi-billion-euro investment in tangible landscape-scale propositions for Building with Nature.

Both Wetlands International and its partner Boskalis are recruiting positions to help mobilise this ambitious joint programme, complementing the existing team. A Senior Programme Developer by Wetlands International, who will support programme development and lead the way in securing funding for the initiative. “A programme coordinator by Boskalis, who will help to develop the programme together with the partners as well as support the implementation process of building with nature propositions in the target countries.”

Both positions will be working closely together as well as with an existing team of representatives from partner organisations. They will play a key role in strengthening the current partnership between Wetlands International and Boskalis and forge partnerships with a broader set of regional and international partners. Both job openings offer a unique opportunity for candidates to be part of and connect both with corporate and NGO environments and develop innovative approaches to solving the complex societal challenges of the 21st century.
Building with Nature is an engineering approach that applies traditional civil engineering measures alongside ecosystem restoration and conservation measures in support of sustainable and climate-resilient coastal development. Instead of ‘fighting’ nature with dams and dykes, Building with Nature solutions work with and along the dynamics of nature. For example, by allowing river flows and sea currents to reinforce the coast-line with sediment. Or by restoring ecosystems so that they once more provide protection against extreme events and offer valuable ‘natural capital’ in the form of shell-fish, timber and recreational opportunities. Building with Nature solutions are adaptive, and typically cheaper to construct and maintain, compared to static infrastructure solutions (Rijkswaterstaat 2014). The environmental co-benefits enable more productive and multi-functional land-use. Local stakeholders are involved in design, construction and maintenance of measures. Building with Nature solutions come in many different shapes and forms.

Coastal solutions may consist of levees, lined with wetland foreshores and oyster reefs further down the coast. Delta solutions may involve restored floodplains that capture flood waters alongside embanked urban centers. Various groups have been demonstrating these approaches including the Ecoshape consortium, PIANC and the US Army corps of engineers. Building with Nature fits within the broader definition of nature-based solutions, more specifically representing interventions that are related to hydraulic and water engineering practice.