

The University of the South Pacific's Sustainable Sea Transport Research Programme

The University of the South Pacific (USP) is owned by 12 Pacific Island states. Led by Dr Peter Nuttall, the Sustainable Sea Transport Research Programme has for the past four years been advancing the cause for low carbon shipping, focussing on the particular challenges of the South Pacific Large Ocean Developing States taking a multi-disciplinary approach. The Pacific is the most dependent region in the world on imported fossil fuels (of which transport, and often shipping, is the biggest user) as well as being at the forefront of catastrophic impacts of climate change. Sea transport is also the lifeline of Pacific island communities. Despite the obvious logic in support of low carbon shipping, until this research programme was initiated in 2012, no-one had looked at this area in the Pacific since the 1980s and there was virtually no debate happening, no published literature, and certainly no focus on shipping despite the efforts directed towards reducing greenhouse gas emissions, adapting to climate change and in reducing the region's fuel bill.

Brief summary of key outputs:

- [SSTT2012](#) and [SSTT2014](#) – Sustainable Sea Transport Talanoa –these two international events were hosted by USP in Suva, Fiji and covered Pacific seafaring heritage and revival, sea transport today, domestic and international shipping innovations, women and youth, challenges faced in the Pacific, the priorities for the future, economics and financing, policy, and why the Pacific can lead the world in transitioning to low carbon sea transport. Both were well attended and calls have been received for another Talanoa to be hosted in the next year.
- Development of a [Regional Research and Education Strategy](#) for the Pacific to transition to low carbon sea transport focused on a co-ordinated programme to develop the capacity of Pacific countries to transition in a long term sustainable manner.
- Postgraduate (MSc and PhD) research programme established at USP. Postgraduate students are now working on areas including role of IMO and Flag States, hydrogen fuel cell propulsion for small boats, climate financing and low carbon shipping transition, village and island group sea transport demand and potential, improved efficiency of “uneconomic” domestic shipping in Fiji, Vanuatu shipping and carbon, and economics of low carbon shipping for Pacific SIDS. Postgraduate students are being supported by leading academics from Germany and UK.
- Development and delivery of undergraduate courses (levels 2 and 3) in sea transport and shipping (students include those from Federated States of Micronesia, Fiji, Papua New Guinea, Solomon Islands, Tonga, Tuvalu and Vanuatu)
- Establishment and hosting of the [Oceania Centre for Sustainable Transport](#)
- Support to governments in the Pacific and regional bodies such as the Pacific Islands Development Forum in terms of action internationally and domestically e.g. support for Government of the Republic of the Marshall Islands in both UNFCCC and IMO processes and development of a framework for a “whole of country” transition to low carbon transport. RMI Government and USP are now establishing the Micronesian Center for Sustainable Transport (see [RMI USP Agreement press release](#)) to implement that framework in Majuro as a catalyst for other Pacific states and SIDS globally. This has led to inclusion of sea transport as a top regional priority for the Pacific, for example [Shipping Emissions Talanoa](#) and [Suva Declaration on Climate Change](#) see para 19f)
- Developed a wide network of partners and a “coalition of higher ambition” in low carbon shipping and related fields to support Pacific islands in meeting the challenges they face including industry innovators, leading academics and researchers, and politicians. This includes practical trials of key technologies such as wingships, flettner rotors, soft sails and solar powered vessels.
- Numerous presentations to various fora around the world (including Switzerland, Holland, Germany, UK, Japan, Canada, Maldives, and Australia as well as across the Pacific) and regular publications in leading academic journals and industry publications. Other notable publications include Renewable Energy Options for Shipping: Technical Brief published by including IRENA and the Sustainable Sea Transport for the Pacific Islands: The Obvious Way Forward policy brief included in the Global Sustainable Development Report of the UN in 2015 and more recently development of the Sustainable Sea Transport Solutions for SIDS: Transitioning to Low Carbon Shipping Toolkit with UNCTAD which is due for release shortly.
- Publications listed on [Oceania Centre for Sustainable Transport](#) website