

THE WORLD ASSOCIATION FOR WATERBORNE TRANSPORT INFRASTRUCTURE

P I A N C

AUSTRALIA & NEW ZEALAND
ANNUAL REPORT 2023



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Annual Report 2023
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WHAT IS PIANC?

The World Association for Waterborne Transport Infrastructure.

Bringing together experts on technical, economic, environmental and planning issues pertaining to waterborne transport infrastructure.

PIANC is the forum where professionals around the world join forces to provide expert guidance on cost-effective, reliable and sustainable infrastructure to facilitate waterborne transport.

PIANC (which historically stood for the Permanent International Association of Navigational Congresses) began in 1885 – one of the first international technical organisations, committed to regular global gatherings of experts to share knowledge and expertise.

A non-political and non-profit organisation, PIANC continues to be the leading partner for government and the private sector in the design, development and maintenance of ports, waterways and coastal areas. Members include national governments and public authorities, corporations and interested individuals.

At the core of PIANC's mission is the publication of high-quality Technical Reports realised by international Working Groups. PIANC Working Groups are composed of participants from multiple member countries who have expertise in the issue being investigated. The groups gather, analyse, and consolidate international, state-of-the-art, best practice material to provide evidence-based guidance.

PIANC's other key pursuit is the organisation of international and regional conferences, such as the four-yearly PIANC World Conference, last held in Cape Town, South Africa, in 2024.

PIANC AU-NZ has successfully hosted the new PIANC Asia Pacific (APAC) Conference biennial series in 2020 and 2022.

PIANC Australia & New Zealand

PIANC Australia & New Zealand is one of the largest of the 28 National Sections within PIANC International, with a growing membership of 94 corporate members and 182 individuals (including 54 student members) as at 31 Dec 2023.

Our core purpose is to provide leadership in the field of waterborne transport infrastructure to advance the communities, economies and environments in Australia and New Zealand.

What we do to fulfil our core purpose:

- Share industry knowledge and best practices through local, national and regional events, including the biennial Coasts and Ports Conference – the pre-eminent forum for professionals to discuss multi-disciplinary issues related to coasts and ports.
- Promote PIANC Technical Reports and other publications, and actively contribute our knowledge and experience for their development.

- Work with government and other industry bodies to positively influence policy and provide guidance relating to waterborne transport infrastructure in our region.
- Nominate and support PIANC Australia & New Zealand members to join relevant PIANC Working Groups.
- Support the next generation of professionals in our industry by providing education and guidance which fills the gap beyond academic studies.
- Create opportunities for young professionals to meet and network with the broader industry.
- Represent the interests of our members with PIANC HQ and provide representation on relevant PIANC Commissions.

STRATEGIC

PLAN

The Board of PIANC Australia & New Zealand has articulated its purpose statement and overarching goal in the [2023 Strategic Plan](https://pianc.org.au/about/annual-strategic-plans/) Available at <https://pianc.org.au/about/annual-strategic-plans/>

The Board of PIANC has lofty ambitions for 2023 and beyond. We intend to:

- Provide great experiences and value for our members, ensure that member experience is consistent across our regions in Australia and New Zealand, and attract new members to the PIANC community.
- Strongly support our members who get involved with PIANC. This includes international working groups, regional chapters, event committees, our mentoring program and board activities.
- Strengthen our position of leadership in the field of waterborne transport infrastructure in Australia, New Zealand and beyond.

To meet these ambitions, PIANC Australia & New Zealand must continue to mature and improve. In 2023 we will focus on making our operations more robust, consistent, and efficient for the benefit of our members. '

WHAT IS MOST IMPORTANT FOR PIANC AUSTRALIA & NEW ZEALAND, RIGHT NOW?

OUR OVERARCHING GOAL FOR 2023

The single focus shared by the board of PIANC Australia & New Zealand that we must accomplish by end of 2023.

Take PIANC AU-NZ operations to the next level

SUPPORTING OBJECTIVES FOR 2023

The following objectives are the key components that will support achievement of our overarching goal for 2023

1. Enhance PIANC Australia & New Zealand operations
2. Provide a great experience to members across our regions
3. Strengthen our position of leadership
4. Run successful major events including Coasts&Ports2023 (as co-hosts)

THE CHAIR'S REPORT



What a wonderful year we have had! So many highlights – some of which are listed below.

We co-hosted the biggest ever Australasian Coasts & Ports Conference 15 – 18th August in Queensland. With 460 enthusiastic delegates and 160 expert presentations, the Conference was a technical knowledge-sharing, networking and financial success. There was a palpable excitement at being reconnected, and a strong sense of mission for the future, and the global energy transition. Huge congratulations to all the organisers, led brilliantly by Dr Andrew Pomeroy.

PIANC AU-NZ's own 1.5 day pre-Conference technical seminar was on "Decarbonisation of ports – the feasibility of shore power". Led by Deputy Chair Peter Engelen, the seminar brought together 75 participants from across the port and energy industry to discuss the challenges and solutions related to the complex topic of onshore power supply.

In June 2023 PIANC AU-NZ welcomed Paul Weston as our new – and very first – Executive Officer (part time). Paul has swiftly taken up the challenges of his role – delivering important functions of PIANC AU-NZ's strategy and operations.

Our amazing regional chapters and YPs organised twenty regional technical and networking events in 2023. Special honours must go to PIANC Tasmania for hosting its own PIANC Tasmania Conference in 2023 – a huge achievement and major industry connecting event for the island state. We also welcomed the new team leading PIANC Aotearoa New Zealand who successfully hosted a four-city hybrid event in November on the topic: *Ports to Zero: Decarbonizing the Port Industry*.

Beyond our region, our members continued to participate strongly in PIANC's International Working Groups, and in international activities and initiatives. Congratulations to all involved.

In 2023 we began work on the third PIANC Asia Pacific conference APAC2024, to be held in Sydney in August 2024. Our experienced Local Organising Committee includes several Board members and is led by leading ARUP engineer David Dack. The Conference theme is *Connecting Asia Pacific Ports in a Changing World*, and we look forward to welcoming members and industry and government colleagues from around the region.

LUKE CAMPBELL

“
There was
a palpable
excitement at
being reconnected,
and a strong sense
of mission for
the future,
and the global
energy transition.”

BOARD
MEMBERS



JOEL BAILEY
Position: Board Member
Ports and Coastal Specialist at Hatch



LAURENCE BENN
Position: Treasurer
Principal Engineer of Critical Projects at OMC International



WILLIAM BLANK
Position: Board Member
Associate Director – Development at Hall Contracting



GREG BRITTON
Position: PIANC AU-NZ Technical Commission Lead
Director of Royal Haskoning DHV in Australia.



LUKE CAMPBELL
Position: PIANC AU-NZ Chair
Director Ports & Marine Lead at WGA (Wallbridge Gilbert Aztec),



CHRIS CARBOON
Position: Secretary
Senior Consultant – Ports and Coastal at Jacobs



RON COX
Position: NCCOE* Representative
Water Research Laboratory, UNSW Civil & Environmental Engineering.
* NCCOE – National Committee on Coastal and Ocean Engineering (NCCOE) of Engineers Australia (EA)



MICHEL DE VOS
Position: Board Member
Group Executive Major Projects, Assets and Technical Services (MPATS) at TasPorts.



PETER ENGELEN
Position: Deputy Chair
General Manager, Planning and Infrastructure at NSW Ports.



WILL GLAMORE
Position: Ex-officio Board Member
Professor at Civil & Environmental Engineering, UNSW Sydney



MIKE GALLACHER
Position: Ports Australia Representative
CEO Ports Australia



RHYS JONES
Position: EA NCCOE Representative'
General Manager – Strategy & Growth at Darwin Port



SCOTT KEANE
Position: Board Member
Principal Industry Director – Stantec Brisbane.



NEIL LAWSON
Position: Ex-officio Board Member
Vice President of PIANC International
Managing Director at Neil Lawson and Associates Pty Ltd



JACKIE SPITERI
Position: Membership & Sustainability Lead
Managing Director at Sustainable ESG



CLAIRE TREEBY
Position: Board Member & YP Com AU-NZ Chair
Director – Ports and Terminals, Australia-Asia, at Hatch

NEW
APPOINTMENT

In May 2023 PIANC AU-NZ welcomed Paul Weston as our new – and very first – Executive Officer!

In recent years PIANC AU-NZ has undergone an exciting period of growth – in membership numbers, events, communications, and increased outreach through the establishment of regional chapters.

In 2022 the PIANC AU-NZ Board (all volunteers) agreed that in order to maintain and progress our vision, outreach and capacity we required further dedicated and professional help.

A new part-time position of Executive Officer & Membership Coordinator – delivering important functions of PIANC AU-NZ’s strategy and operations – was advertised towards the end of 2022. And at the May 2023 AGM, Chair Luke Campbell was delighted to welcome Paul Weston and introduce him to our members as our new EO.

Paul, a keen long-term member of PIANC, has decades of experience in the maritime industry, from working at sea within the cruise industry to key operational roles in various Australian ports including Darwin, Gladstone, Melbourne and Tasmania, and in his current (and continuing) position as Regional Sales Manager – Australasia for Trelleborg Marine Systems.

Paul was delighted to take up the opportunity ‘that would allow me to contribute to an organisation that I respect and an industry that I am passionate about.’

The EO position directly reports to the PIANC AU-NZ Chair, and will work with the Chair and allocated members of the Board on the implementation of strategic objectives and operational tasks in line with the PIANC AU-NZ Annual Strategy.

We are thrilled to have Paul’s expertise and support in growing our mission.



Board Melbourne Nov 2023: L-R Tom Shand (Observer), Joel Bailey, Laurence Benn, Greg Britton, Peter Engelen, Claire Treeby, Michel de Vos, Paul Weston, Scott Keane, Luke Campbell.

COMMISSION LEADERS



ProCom
PIANC INTERNATIONAL PROMOTION COMMISSION
NEIL LAWSON
Board Member PIANC AU-NZ
Neil Lawson & Associates P/L



EnviCom
ENVIRONMENTAL COMMISSION
MARIKA CALFAS
Chief Executive Officer
at NSW Ports



RecCom
RECREATIONAL NAVIGATION COMMISSION
GREG BRITTON
Board Member PIANC AU-NZ,
Technical Director of Royal
HaskoningDHV in Australia.



MarCom
MARITIME NAVIGATION COMMISSION
SCOTT KEANE
Board Member PIANC AU-NZ
Industry Director – Ports &
Maritime at Cardno (now Stantec)



CoCom & PTGCC
INTERNATIONAL CO-OPERATION COMMISSION & PERMANENT TASK GROUP ON CLIMATE CHANGE
RON COX
Board Member PIANC AU-NZ
Hon A/Prof, Water Research
Laboratory, UNSW Civil &
Environmental Engineering.

REGIONAL CHAPTERS

Each Regional Chapter has an independent leadership committee with responsibility to manage its own regional events and communications while also reporting to and liaising with the PIANC AU-NZ Board.

In 2023 our amazing regional chapters hosted 20 networking and technical events held in fourteen locations: Adelaide, Auckland, Brisbane, Christchurch, Darwin, Fremantle, Launceston, Melbourne, Picton, Port Hedland, Sydney, Townsville, Wellington and Perth.



NSW/ACT REGIONAL CHAPTER CHAIR
CATHERINE BLAINE



VIC REGIONAL CHAPTER CHAIR
LAURENCE BENN



NEW ZEALAND CHAPTER CHAIR
MATT MCKEE



TAS REGIONAL CHAPTER CHAIR
NEIL LAWSON



QLD/NT REGIONAL CHAPTER CHAIR
DR SAM MAZAHERI



WA REGIONAL CHAPTER CHAIR
CLAIRE TREEBY



SA REGIONAL CHAPTER CHAIR
PAUL CONSTANCE

YOUNG PROFESSIONALS

AUSTRALIA & NEW ZEALAND NATIONAL YP-COM REPRESENTATIVES



LISA WYNNE
YPCOM AU-NZ Chair



MARK BENNET
YPCOM AU-NZ
Deputy Chair



CLAIRE TREEBY
Outgoing Chair

PIANC's Young Professional (YP) Commission is dedicated to the career development of YP members (40 years of age and younger) locally, nationally and globally. YPCom is a vital part of PIANC's future.

As one of the most active groups worldwide, PIANC AU-NZ YPs hold networking events across Australia, nominate Australian YP's for Working Groups, liaise with YPCom International, bestow annual awards, and work with regional chapters and the PIANC AU- NZ Board on related activities.

In March 2023 the PIANC AU-NZ Board announced the appointment of two amazing young professionals to lead the region's YPs over the next two years.

Our new YPCom Chair is Lisa Wynne, an experienced environmental scientist with a demonstrated history working in marine and terrestrial environmental approvals and planning, as well as contaminated sites. Lisa is based in WA.

Deputy Chair Mark Bennet is a maritime engineer who has been a PIANC VIC stalwart for several years. Mark was a crucial member of the local organising committee for PIANC's successful second APAC Conference held in Melbourne in 2022.

Huge thank you must go to outgoing YPCom Chair, Claire Treeby. Claire was YPCom AU-NZ Chair for 2.5 years. She can look back with satisfaction at what she achieved, including several firsts such as YP leadership breakfasts, student-industry careers fairs, and Women in Maritime events, and the integration of YP representatives in all regional chapters.

In 2023 PIANC AU-NZ YPs held several networking and three leadership breakfast events across Australia, in Brisbane, Melbourne and Perth, and were active on all regional chapters in organising technical seminars and conferences.

To find out more and get involved, please visit our website: <https://pianc.org.au/about/young-professionals/> or join our LinkedIn: <https://www.linkedin.com/groups/5078998/>

REGIONAL CHAPTERS

YP REPRESENTATIVES



NSW/ACT REGIONAL YP REP

SHANE FREEMAN



NEW ZEALAND YP REP

ANDREW BROWN



QLD /NT REGIONAL YP REP

JACK KLINER



SA REGIONAL YP REP

UDDISH SINGH



VIC REGIONAL YP REP

MARK BENNET



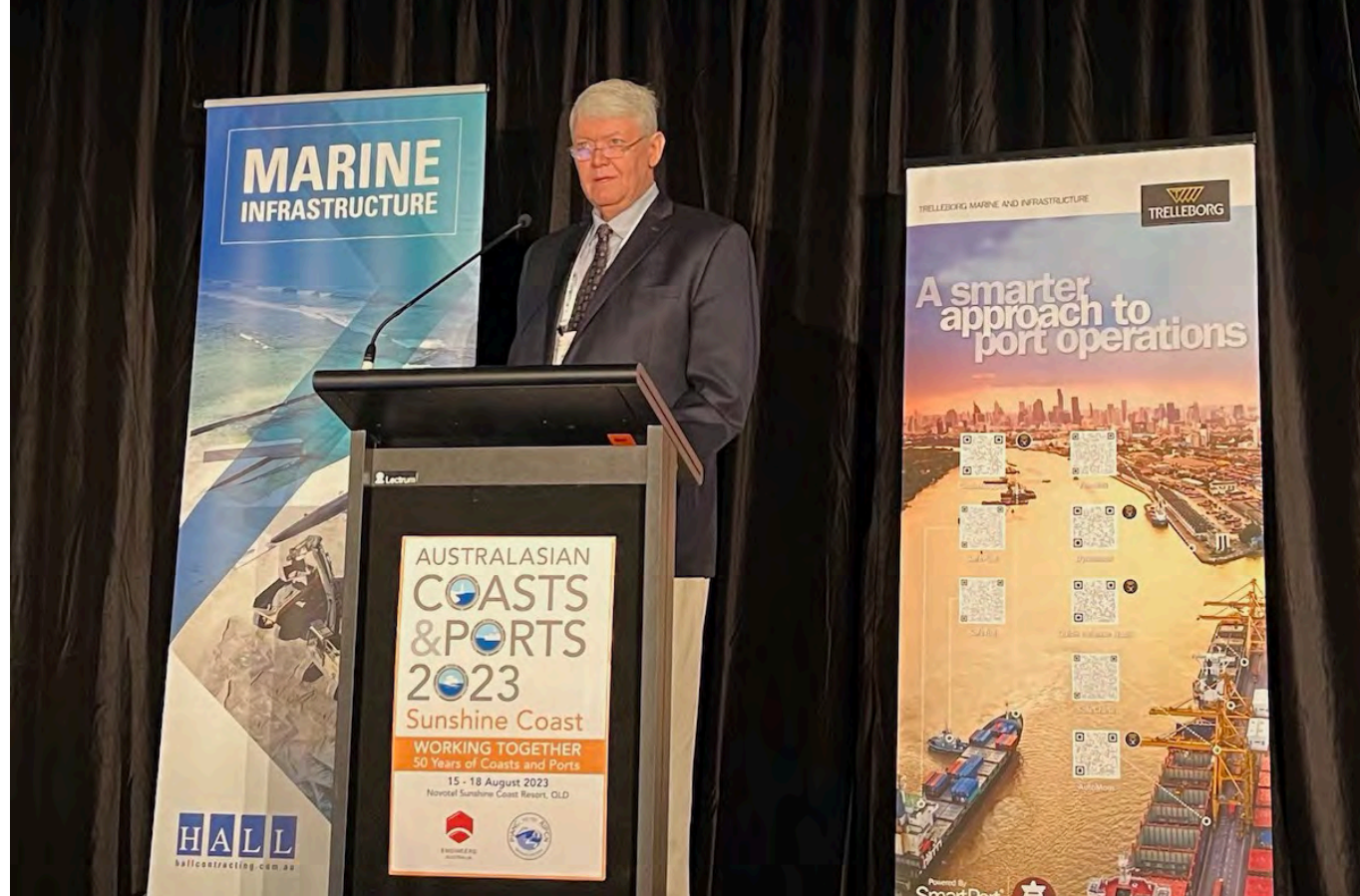
TAS REGIONAL YP REP

TOBIAS ALDRIDGE



WA REGIONAL YP REP

MICHAEL FISHER



CONFERENCES

THE AUSTRALASIAN COASTS & PORTS 2023 CONFERENCE

There were 460 enthusiastic delegates and 160 expert presentations at the biggest ever Australasian Coasts&Ports Conference held on the Sunshine Coast in Queensland 15 – 18th August 2023.



This biennial Conference was co-convened by PIANC Australia & New Zealand and Engineers Australia, with the support of Engineering New Zealand and the New Zealand Coastal Society. The 2023 Conference was celebrating 50 years, and the first time together in person since 2019. The hardworking local organising committee was brilliantly led by Dr Andrew Pomeroy.

“Working Together” was the theme of this Conference, and it was manifested in all of the Conference proceedings. In recognition of the 50-year anniversary, the entire back-catalogue of proceedings was made open-source, ensuring that valuable knowledge remains accessible to all.

PIANC AU-NZ Chair Luke Campbell was one of the first speakers at the Opening Plenary. He gave an outline of PIANC’s beginnings in the late 19th century– a period of enormous global change enabled by many scientific and engineering feats, including the replacement of sailing ships with the new technologies of steamships. We are being asked, he said, in the current day



CONFERENCES



to do our own radical energy transition as we move towards decarbonisation and renewable energies.

Conferences such as this one provide key opportunities for our ports, maritime and coastal community to share our knowledge, expertise and ambitious visions for the future. But the work cannot be done alone, or even just within our community. It is more than time, he said, for all of us to speak outside the room of scientists and engineers.

Keynote speakers were PIANC Environmental Commission Chair Dr Burton Suedel, who spoke of positive progress in the US and elsewhere with Working with Nature projects; and Jamie Simmonds, a community relocation & managed retreat expert based in Brisbane whose book ‘Rising from the Flood’ recounts his experience as Project Director for the relocation of the small town of Grantham, Queensland – one of the quickest, most cost-effective and successful examples of managed retreat in the world.

Social events included a Women in Coastal Geoscience and Engineering function, a YP networking function (somewhat overshadowed by the Matildas playing in the World Cup semi-final at the same time – sadly they lost) and of course the Conference Dinner.

Opposite Page:
Keynote Speaker,
Burton Suedel, Chair of
PIANC Environmental
Commission; Ron Cox &
Luke Campbell at opening
session.

Above L-R clockwise:
Keynote speaker Jamie
Simmonds with Andrew
Pomeroy; Annabel
Sandery, Mary O’Connell
& James Carley; Indra
Jayewardene with
Gareth Davies & Stefan
Zieger; Henrique Rapizo,
Mariana Cussioli, Joao
Albuquerque and friend.



Top right: Brilliant Conference Event Managers East Coast Conferences, Amy McIntosh, Jayne Hindle, Jas Durbidge.

Middle: PIANC Stalwarts Harvinder Singh, Scott Keane, Nathan Burmeister & Colin Hedderwick.

Bottom: Cristina Viola & Wakhidatik (Ida) Nurfaida.

The Conference dinner presenter was Dr Maddy McAllister, the Senior Curator for Maritime Archaeology at the Museum of Tropical Queensland and James Cook University. Her research focus revolves around recording, visualising and interpreting underwater shipwreck sites.

The concluding plenary session included PIANC AU-NZ stalwarts Tom Shand and Ron Cox along with long term colleagues Angus Gordon and James Carley, who reflected on the 50 year legacy of the Australasian Coasts & Ports Conference and where to from here.

‘Whatever the future,’ noted Tom Shand, ‘we’ve got some big challenges ahead of us. These will need close integration of the analysis (research) and synthesis (design and construction) branches. Conferences like Coasts & Ports play a key role in bringing these two branches together to share their respective experiences and learn from each other, strengthening the overall discipline.’

Video is viewable at <https://www.youtube.com/watch?v=Ud2f2RkQrbo>

Links to Conference Presentations are now available at <https://coastsandports2023.com.au>

More Images: <https://pianc.org.au/pianc-news/celebrating-coastsports2023/>

Grateful thanks to our wonderful Conference Platinum Sponsors – Hall Consulting, Trelleborg, and the Queensland Government. Big thanks must also go to our brilliant Gold Sponsors, the UNSW Water Research Laboratory and Tonkin & Taylor, and to our steadfast Silver Sponsors – AW Maritime, The Jetty Specialist, KBR, Manly Hydraulics Laboratory, Moor Marine, Royal HaskoningDHV, Tuflow, WGA, and WSP. Thanks also to our supportive Bronze Sponsors – Advisian, Beca, International Coastal Management, HR Wallingford, JBP Scientists & Engineers, Shibata Fender Team, Water Technology Ltd, and SMEC. We couldn’t have done it without you! It’s called Working Together!



PIANC AU-NZ Young Author Award Presentation 2023, Australasian Coasts & Ports Conference, Sunshine Coast August 2023. L-R: Luke Campbell, Chair PIANC AU-NZ, Scott Collins, Toby Devlin, A/Prof Ron Cox, PIANC AU-NZ Board.

COASTS & PORTS YOUNG AUTHOR AWARDS

The standard was so high at the 2023 Australasian Coasts & Ports Conference that the judges awarded two PIANC Young Authors awards! The winning authors were Scott Collins and Toby Devlin.

Scott Collins’ paper was ‘Hay Point Shiploader & Berth Replacement: a project and innovation case study.’ (Co-Author –Johnathan Kong from BHP, Brisbane). Scott is a Technical Director in Aurecon’s Ports, Marine & Coastal team, and the Queensland Practice Lead for the ports, marine & coastal business. He has worked as an engineer and project manager for over 16 years on coastal, marine, port and resources projects. The Hay Point project which Scott’s paper discussed is the shiploader and berth replacement (SABR) project for BHP Mitsubishi Alliance (BMA), at Berth 2 at Hay Point, about 40 kilometres south of Mackay.

Scott’s talents and enthusiasm for PIANC and the industry may be inherited. ‘A fun fact’ Scott has informed us ‘is that my old man (Neil Collins) won the PIANC young author award back in 1990.’

Toby Devlin’s winning paper was ‘The Point Richards rock groyne for deflecting seagrass wrack.’ Toby is Group Manager – Coastal and Environments VIC | Senior Engineer at Water Technology in Victoria. Toby has considerable experience in coastal processes and modelling and has been involved in studies in Australia as well as in several countries overseas, ranging from wave and sea-level models to inform coastal hazards, to sediment transport assessments for both coastal management and dredge plume environmental impacts. He also has experience in providing advice on coastal processes to inform management and planning of adaptation and development in the coastal zone.

Toby’s paper discussed the design and construction of the new rock groyne constructed at the Point Richards boating facility in Portarlington, Victoria.

SHORE POWER WORKSHOP

As part of the Coasts&Ports2023 Conference, PIANC AU-NZ hosted a very successful pre-Conference 1.5 day workshop on the topic of “Decarbonisation of ports – the feasibility of shore power”.



Luke Campbell – Chair PIANC AU- NZ, with Shore Power Workshop organisers: L-R Peter Engelen, Jackie Spiteri, Scott Keane, Ron Cox, Sam Mazaheri. Absent: Neil Lawson

Shore power is a significant component to decarbonise port operations. When vessels are moored in a port, marine fuels are used in the vessel’s auxiliary engines to generate electricity to enable operations of onboard equipment. Emissions (greenhouse gases, air pollutants and noise) from the auxiliary engines comprise a significant proportion of overall emissions at a port. Supplying power to vessels from the onshore grid would reduce emissions, and when more renewables are added to the energy mix, would largely eliminate emissions.

PIANC’s event brought together 75 participants from across the port and energy industry to raise awareness of international developments and discuss the challenges and solutions related to the complex topic of onshore power supply. The group discussed grid network capacity, renewable energy supply, vessel power demand, design standardisation, transformer technology, cable management systems, sustainability, risk, safety, assurance, insurance, and finance.

The workshop heard about early adopters of shore power in Australia, such as the Port Authority of New South Wales Bays Precinct and about other ports that are undertaking feasibility reviews. Comprehensive briefings were provided from the Port of Hamburg about its shore power developments, and cruise and container shipping lines shared their sustainability objectives to convert their ships to be shore power enabled.

Workshop findings will be shared with the recently announced PIANC MarCom Working Group ‘Onshore Power Supply’, whose report is highly anticipated by the industry.

Every port is unique – every shore power application has its own unique considerations. While time will tell if shore power will be delivered in all circumstances, it is clear that all ports will be faced with the question whether shore power is feasible.

A 2-minute video about the Workshop is on our YouTube channel.
https://www.youtube.com/@pianc_anz

Shore Power Workshop Presentations are also available on our website
<https://pianc.org.au/resources/presentation>

NEW ZEALAND PORTS TO ZERO

In November 2023 PIANC New Zealand successfully hosted a four-city hybrid event on that most pressing topic: Ports to Zero: Decarbonizing the Port Industry.

Experts from Wellington’s CentrePort, Lyttelton Ports at Christchurch, Auckland Transport, and PIANC AU-NZ Corporate members Beca and Tonkin & Taylor gave presentations about two of New Zealand’s leading ports’ decarbonization journey and Auckland Transport’s project of electric ferries.

Interest around the country was so strong that a fourth in-person venue was added – at Picton, the South Island terminal port for New Zealand’s inter-island passenger and freight ferries.



Attendees in-person or online learnt about the latest technologies and innovations being used to reduce emissions, and how these projects are helping to create a more sustainable future for New Zealand. Projects included:

- Wellington’s CentrePort’s current initiatives that have seen a 31% reduction in emissions since 2019 and their exciting plans for Shore Power in partnership with StraitNZ.
- Auckland harbour ferries are set to get quieter, cleaner, and greener, thanks to two new fully electric ferries for commuters and sightseers to travel on.
- Lyttelton Port is committed to reducing its carbon emissions and presented on progress to date and their plans for the future, as they work towards a goal of net zero carbon by 2050.

The event, the first held in New Zealand by PIANC since the Australasian Coasts & Ports online conference of April 2022, was well attended both in person and online. Aotearoa New Zealand Chapter Chair, Matt McKee from CentrePort said the event ‘went better than I could have ever hoped for.’

Aotearoa New Zealand Chapter Chair, Matt McKee from CenterPort (pictured above)said the event ‘went better than I could have ever hoped for.’



TASMANIA CONFERENCE

PIANC Tasmania Chapter was formed only in 2022, but they ambitiously took on hosting a major conference in their second year!

PIANC TASMANIA 2023 was their first major forum focusing on ports and maritime projects and experience from around the island state of Tasmania. Held from 20th to 22nd March 2023, at the Australian Maritime College (AMC) just outside Launceston, it featured keynote addresses and presentations from professionals both from Tasmania and beyond.

With the conference theme as *Connecting Tasmania*, all presentations focused on Tasmanian projects and issues. PIANC Tasmania Regional Chapter Chair, Neil Lawson, noted that there are exciting times ahead for the Port industry in Tasmania with the development work at QuayLink DevonPort, Maquarie Wharf Hobart and around 20 projects at Devonport, Inspection Head, Burnie, Flinders Island, King Island, Stanley and Bell Bay Ports either under construction or planned for the next few years representing over one billion dollars of public and private expenditure.

There are two pillars that PIANC AU-NZ provides to its members; dissemination of up-to-date technical content through the international Working Group Reports, seminars, workshops and conferences, and networking to optimise the connection of the ports and maritime professional community. “*Connecting Tasmania*” reflected both these pillars, in presenting up-to-date technical knowledge, and connecting the professional community in Tasmania and beyond.

On the 20th of March there were informal welcome drinks at the Silo Hotel and on the 22nd the site visit was a very informative 3-hour tour of AMC including the simulator and various model testing basins and flumes.

With abundant sponsorship and networking support from both government and industry, the Conference was a technical and financial success. It clearly filled a need within the ports and maritime industry in Tasmania, as well as attracting many registrations from the Australian mainland.

Congratulations to the indefatigable Neil Lawson (pictured above) and all his Tasmanian Chapter colleagues for their work on this project.





AROUND THE REGIONS



In 2023 we supported and engaged our growing membership through the amazing work of our seven regional chapters and Young Professionals, who between them organised twenty regional technical and networking events in 2023, including port tours, YP leadership breakfasts, industry networking events, and technical seminars on cutting edge issues.

SOME HIGHLIGHTS:

The new team leading PIANC Aotearoa New Zealand – Matthew McKee and Jonathan Stewart with YPs Andrew Brown and Alex Radcliffe successfully hosted a four-city hybrid event in November on the topic: *Ports to Zero: Decarbonizing the Port Industry* (see p19).

PIANC Western Australia hosted a fascinating history lesson in a seminar *Navigating Through Time: A History of Celestial Navigation*, which looked at celestial navigation in ancient and modern maritime practices, and its relevance to our industry today. WA chapter also organised many networking events and a trip up north to check out Port Hedland. In yet another first the Chapter organised a seminar where PhD students working on maritime issues at University of Western Australia's Indian Ocean Marine Research Centre presented on their cutting-edge research to industry representatives.

PIANC Queensland/Northern Territory chapter led a PIANC expedition to the Port of Townsville, as well as hosting numerous networking events and a very popular 'Ocean Energy & Offshore Wind' hybrid seminar, while PIANC Victoria hosted an *Exploring Shore Power* presentation and a YP leadership breakfast.

PIANC New South Wales hosted a technical seminar on empty container parks, and detecting seisch in NSW harbours, as well as coordinating with Engineers Australia a workshop on *Resilient Coasts & Waterways*. PIANC South Australia hosted very successful networking events, building its community in preparation for Adelaide's hosting the next Coasts&Ports Conference in 2025!

As well as hosting its inaugural PIANC Tasmania Conference in March (see p20), the chapter hosted a technical and networking event later in the year.

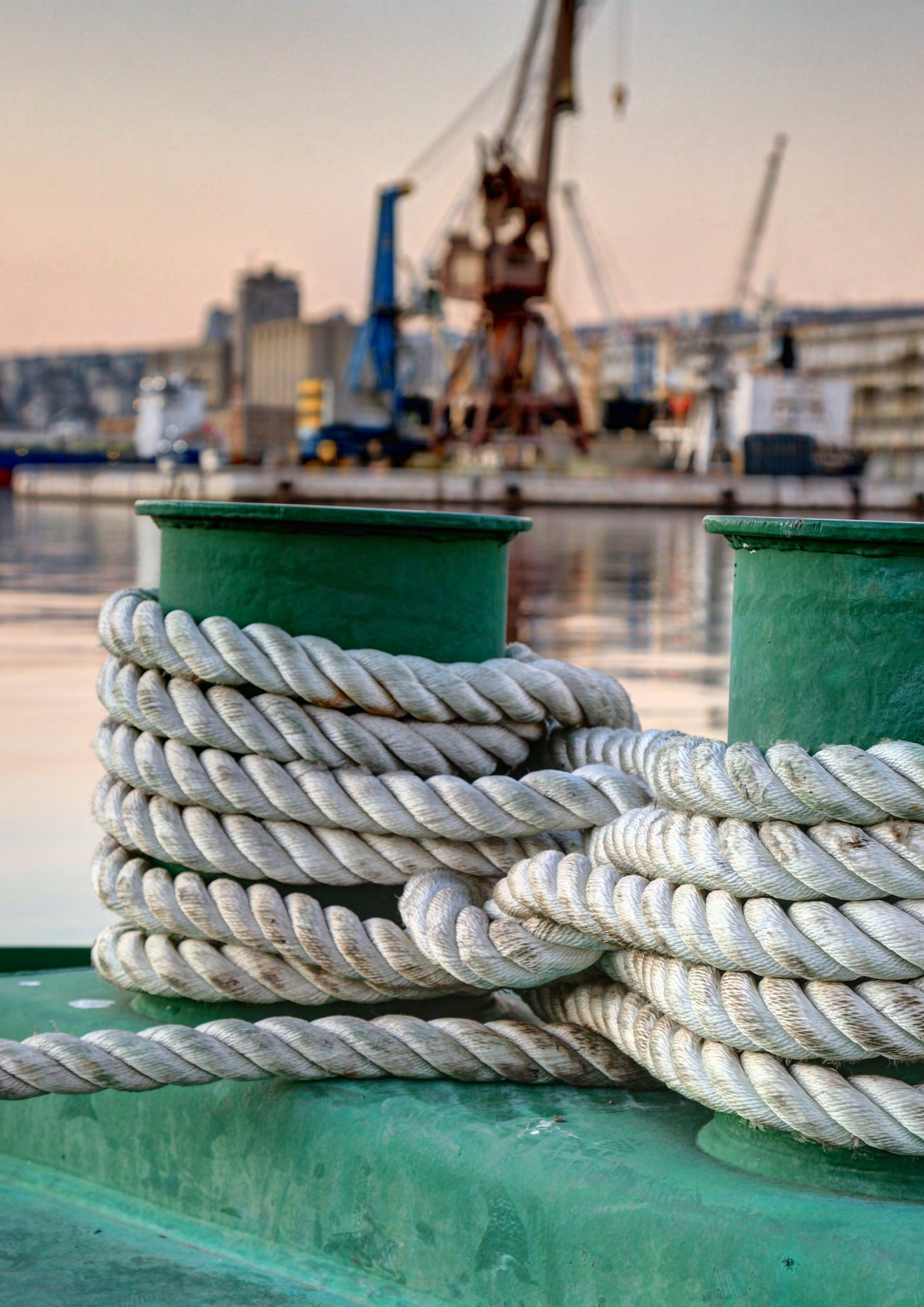
PIANC AU-NZ YPs held several networking and three leadership breakfast events – in Brisbane, Melbourne and Perth, and were active in all regional chapters in organising technical seminars and conferences.

In 2023 PIANC AU-NZ continued to partner with Greenfleet to offset the carbon emissions – through native reforestation – arising from attendance at our events.

Recorded webinars are viewable on our YouTube Channel

https://www.youtube.com/@pianc_anz

More information about our events is at <https://pianc.org.au/events>



WORKING GROUP REPORTS

PUBLISHED BY PIANC INTERNATIONAL IN 2023

Thirteen Technical Reports were published by PIANC International in 2023, as usual covering a wide range of topics related to sustainable waterborne transport infrastructure. Congratulations to all involved.

ENVIRONMENTAL COMMISSION (ENVICOM) (3)

- EnviCom TG3: Waterborne Transport, Ports and Waterways: A 2023 Update of Climate Change Drivers and Impacts
- EnviCom WG157: Environmental Aspects of Dredging, Port and Waterway Construction around Coastal Plant Habitats
- EnviCom WG214: Beneficial Use for Sustainable Waterborne Transport Infrastructure Projects

INLAND NAVIGATION COMMISSION (INCOM) (6)

- InCom WG199: Health Monitoring of Port and Waterways Structures
- InCom WG203: Sustainable Inland Waterways – A Guide for Inland Waterway Managers on Social and Environmental Impacts
- InCom WG207: Innovations in Ship Lift Navigation Concepts
- InCom WG216: Best Practices in Planning and Management of Multimodal Logistics Platforms along Inland Waterways
- InCom TG234: Infrastructure for the Decarbonisation of Inland Waterway Transport
- InCom WG246: Guidelines and Recommendations for River Information Services

MARITIME NAVIGATION COMMISSION (MARCOM) (3)

- MarCom WG167: The Design of Terminals for RoRo and RoPax Vessels
- MarCom WG200: Recommendations for the Design and Assessment of Single Point (SPM) and Multi Point Mooring (MPM) Facilities
- MarCom WG212: Criteria for Acceptable Movement of Ships at Berths

RECREATIONAL NAVIGATION COMMISSION (RECCOM) (1)

- RecCom WG 148: Guidelines for Sustainable Recreational Navigation Infrastructure

“the process of writing the report takes several iterations, first to analyse the data, then writing the chapters and last to modify the chapters in such a way that a unified report is created”

2023 AU-NZ PARTICIPANTS IN PUBLISHED REPORTS

In 2023 participants from our region were involved in all of PIANC Environmental Commission’s published International Reports, and two thirds of those published by the Maritime Navigation Commission.* Well done us!

PIANC Working Group reports are a unique process. ‘The process is certainly different from undertaking a commercial project,’ says PIANC AU-NZ member and participant in MarCom WG212, Dr Wim van der Molen, ‘It is also different from publishing a scientific paper. Collecting data and after that reaching consensus between the group members takes time. Also, the process of writing the report takes several iterations, first to analyse the data, then writing the chapters and last to modify the chapters in such a way that a unified report is created.’

For WG212 contributor Fabien Cogorden, ‘Dedication is what the process requires, but above all interest and a willingness to learn and delve deep into the subject of interest.’

Participating in such a collaborative and thorough process is also, as van der Molen noted, ‘a good opportunity for networking and working together with people from many different international organisations.’

‘It was a great opportunity’ Katrina Dodd (WG200) says, ‘to get to meet really clever people across that world.’

Warm congratulations and thank you to all our AU-NZ members active in producing PIANC Working Groups Reports published in 2023 including:

- Paul Erftemeijer – EnviCom WG157: ‘Environmental Aspects of Dredging, Port and Waterway Construction around Coastal Plant Habitats.’
- Katrina Dodd and Kevin Sartipi – MarCom WG200: ‘Recommendations for the Design and Assessment of Single Point (SPM) and Multi Point Mooring (MPM) Facilities.’
- Wim van der Molen and Fabien Cogordan – MarCom WG 212: ‘Updated Criteria for Acceptable Movement of Ships at Berths.’
- Dave Hopper – EnviCom WG214: ‘Beneficial Use for Sustainable Waterborne Transport Infrastructure Projects.’
- A/Prof Ron Cox – EnviCom Task Group Report No 3: ‘A 2023 Update Of Climate Change Drivers And Impacts For Waterborne Transport, Ports And Waterways.’

* Note that as Australia and New Zealand, unlike Europe, do not have extensive transport systems on our inland waterways we rarely participate in Inland Navigation Commission (InCom) Working Groups, and do not have a representative on the Commission.

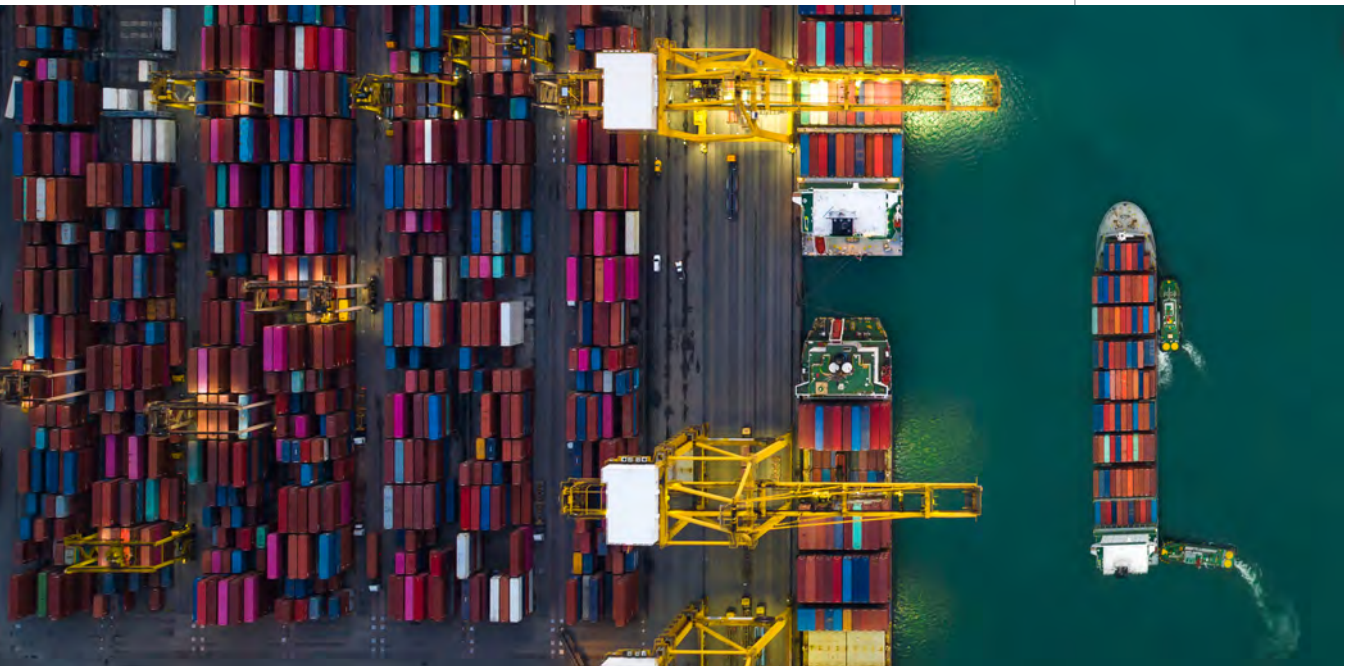
LOOKING AHEAD:

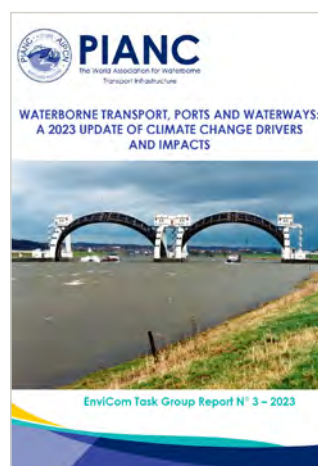
In 2023 PIANC AU-NZ nominated the following AU-NZ members to new PIANC International Working Groups:

Marcom WG153c:	Recommendations for the Design and Assessment of Marine Liquid and Gas Terminals Handling Green Fuels and Fossil-Based Cargoes. Dean Loveridge
MarCom WG248:	Guidelines for Onshore Power Supply (Ops) for Ships. Craig Wilson; Fauzan Zulkhepli (YP)
InCom WG249:	Adaptation of Inland Waterways Infrastructure for Climate Change Impacts. Nick Lewis (YP)
MarCom WG250:	Breakwaters with Vertical and Inclined Concrete Walls – Update Marcom WG 28. Dave Unwin (YP)
MarCom WG251:	Guidance on the Design of Parted Mooring Line Arresting Systems. Ben Poulter; Tobias Aldridge (YP) & Jordan Butler (YP)
MarCom WG252:	Safety by Design of Maritime Infrastructure Projects. Aiden Lewis (YP), Glen Pikor (YP)
RecCom WG253:	Water Quality and Flushing Assessment for Marinas. Lex Nielsen; Joao Goncalves (YP)

In addition, PIANC appointed AU-NZ member Greg Fisk, Climate Change Champion for the Recreational Commission, as Mentor to two new RecCom Groups:

RecCom WG244:	Climate Change Adaptation Planning for Marinas and Boat Harbours.
RecCom WG245:	Carbon Management for Marinas and Boat Harbours.





HON A/PROF RON COX

PROFILE OF TG3

The ‘*2023 Update of Climate Change Drivers and Impacts for Waterborne Transport, Ports and Waterways*,’ was prepared by members of PIANC’s Permanent Task Group on Climate Change (PTGCC).

The publication is free for both PIANC members and non-members.

This Update is of the original PIANC TG3 (2008) report, based on the internationally agreed assumptions and findings of the various reports of the Intergovernmental Panel on Climate Change (IPCC).

The various IPCC reports represent a peer-reviewed body of knowledge that identifies how climate has changed during the 20th and early 21st century, and projects future changes. These include the Special Report on Global Warming of 1.5°C [IPCC SR15, 2018], the Special Report on the Ocean and Cryosphere in a Changing Climate [IPCC SROCC, 2019] and the 6th assessment report [IPCC AR6, 2021].

PIANC AU-NZ Board Member Hon A/Prof Ron Cox represents Australia on the PTGCC. Ron, an internationally respected coastal, ocean and port engineer has delivered many PIANC AU-NZ webinars and presentations on the topic of climate change and its long-term impacts on ports & navigation.

“In line with PIANC and Engineers Australia policies on climate change” he notes, “it is the responsibility of all coastal and maritime sector practicing engineers to consider climate change in all planning, design, construction and management decisions.”

Many of the climate-related changes that matter most to ports and waterways are driven by changes in temperature. Rising air and water temperatures will not only affect seasonal precipitation, sea level and the frequency and severity of extreme events but also winds and waves; storms and surges; hydrodynamics, and morphology. These changes also have implications for the chemical and biological characteristics of water bodies.

The need for adaptation responses and measures to strengthen resilience is highlighted in the Report. Navigation contributions to greenhouse gas (GHG) emissions are also briefly reviewed, along with opportunities for navigation to contribute to overall reductions in anthropogenic GHG emissions.

PROFILE OF WG212

MarCom WG 212: ‘*Updated Criteria for Acceptable Movement of Ships at Berths*’ was released in June 2023. The Report was developed through a three-year collaborative process that included review of existing relevant literature, data collection through questionnaires issued to multiple terminal operators and port authorities worldwide, and assessment of field collected vessel motions data. It builds upon previous guidance (WG24 and WG115) and better reflects current – and emerging – conditions within shipping industry.

For PIANC AU-NZ member Dr Wim van der Molen, whose professional work at Baird & Associates (QLD) focuses on projects in port development and operation, participating in the Working Group was an opportunity to share knowledge and experience ‘that I have gained over the years working with the criteria from WG24 that needed to be reviewed and share that knowledge with the new Working Group.’

‘The new report,’ he says, ‘is much more descriptive in how the criteria were reached, which data were used, etc., so it gives the reader much more background and potentially options to divert from the criteria if there is reason for that...The main change is that most of the new criteria are defined at the location of the ship where loading takes place instead of at the centre of gravity of the ship. That is more sensible and makes some of the criteria stricter when assessing local swaying or heaving at the bow or stern.’

Fabien Cogordan, a Principal maritime engineer with over 20 years local and international experience, was the YP representative on the Working Group. For Fabien, it was a ‘great opportunity to take part in the revision of a very important international guideline which had not been revisited for 27 years. Also an opportunity to work closely with colleagues from all over the world in order to achieve a common objective, which was of great interest.’

‘Dedication is what the process requires, but above all interest and a willingness to learn and delve deep into the subject of interest. The revision of a guideline that we know will be used by so many in the maritime industry requires one to think of the ways in which to make it practical for the numerous readers.’



DR WIM VAN DER MOLEN



FABIEN COGORDAN



PROFILE OF WG200

‘Four years in the making but it’s worth it!’ said Katrina Dodd, an AU–NZ member of PIANC’s International Working Group 200, whose Report ‘*Recommendations for the Design and Assessment of Single Point (SPM) and Multi Point Mooring (MPM) Facilities*’ was published in March 2023.

The document provides up-to-date guidelines and recommendations for the safe design and assessment of SPM and MPM terminals for the global community. ‘It was’ Katrina says, ‘a great opportunity to get to meet really clever people across the world.’

Katrina, who served on the PIANC AU–NZ Board as Treasurer for several years, is Australian General Manager – Engineering for McConnell Dowell. She was joined on the working group by Kevin Sartipi, a PIANC Young Professional, and engineer for JJ Ryan Consulting in Melbourne.

Due to environmental aspects, risk-related issues, or lack of available typical ‘onshore’ marine facilities like harbours, docks or quays, or other cost and schedule constraints – oil, gas, solid bulk and even passenger terminals can be in isolated areas requiring the use of Single or Multi Point Mooring (SPM or MPM) terminals located offshore close to the coastline. Vessels can then connect to these facilities for the loading/offloading of goods and passengers.

SPM facilities are primarily linked to the oil & gas industry while MPMs are used for those and other cargoes. The WG200 guidelines are applicable to Catenary Anchor Leg Moorings (CALM), Single Anchor Leg Moorings (SALM), Fixed Tower Systems, Multi Buoy Mooring Systems (MBM), Spread Mooring Systems (SMS) and other concepts such as Tandem Offloading – together with combined multi buoy and landside bollards as used in some bulk/ passenger loading scenarios. Pipelines, ships and ships’ equipment are excluded.

For more information please see <https://www.pianc.org/publications/marcom/wg200>



KATRINA DODD



KEVIN SARTIPI

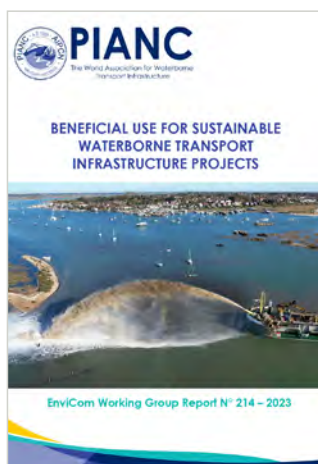
PROFILE OF WG214

EnviCom's WG214 '*Beneficial Use for Sustainable Waterborne Transport Infrastructure Projects*' was released in April 2023. Congratulations to PIANC AU-NZ member Dave Hopper for his work on the report. Dave is Principal Manager Dredging – at the NSW Maritime Infrastructure Delivery Office, part of Transport for NSW. Dave has been a very active PIANC member, having previously contributed to PIANC's 2021 Report WG195 'Applying Ecosystems Services for Waterborne Transport Infrastructure.'

With increased interest in using dredged sediment beneficially, WG214 focuses on how best to plan for and apply Beneficial Use (BU) principles. Socio-economic and environmental conditions, community priorities and legal and policy frameworks are highly variable across different countries and regions. Dredging methods, sediment types and environmental conditions vary from site to site. Consequently, the practicability of BU varies between countries, regions and even projects. Nonetheless, the potential for BU should be considered and evaluated assiduously for sediment dredging projects.

This report describes how dredged sediment can be used to deliver environmental, societal and economic benefits. It considers the key issues associated with the 'Beneficial Use' (BU) of dredged sediment and identifies valuable international practices. In doing so, this report aims to inform and support the BU of dredged material on a global scale.

Increased BU, in harmony with nature, will foster greater circularity and improved environmental and socio-economic sustainability. Achieving these ambitions will, however, necessitate an evolution of established perspectives and ways of working. It requires greater strategic and collaborative planning among project owners, regulators, and other stakeholders to ensure that BU projects can be identified and delivered in the future.



DAVE HOPPER

PROFILE OF WG157

PIANC's EnviCom Working Group Report 157 '*Environmental Aspects of Dredging, Port and Waterway Construction around Coastal Plant Habitats*' offers international best management practices to prevent, minimize or mitigate environmental impacts from dredging, port and waterway construction on coastal plant habitats, such as mangroves, tidal (salt) marshes, seagrass beds and macroalgal communities.

This report comes at a crucial time when the critical role of these habitats in mitigating the effects of climate change through coastal protection, flood mitigation, and carbon sequestration and storage worldwide is increasingly being recognized.

The guide describes how dedicated environmental monitoring and adaptive management during dredging, port and waterway construction works can help avoid or minimize unwanted, detrimental effects to coastal plant habitats. State-of-the-art methodologies for assessment of impacts are described along with their practical application. Techniques to minimise, mitigate and/or compensate impacts are assessed with respect to their practicality, effectiveness and relevance around coastal plant habitats. Ways to restore and enhance these vital habitats – through applying principles of 'Working with Nature' (e.g. beneficial reuse of dredged material) – are also described.

The guidelines are based on a review of available literature and practical experience.

PIANC AU-NZ contributor Dr Paul Erftemeijer said, 'I feel proud to have been able to contribute to this publication as lead author. It is our hope that the report will help to avoid or minimise adverse impacts from dredging and port developments on salt marshes, mangroves, seagrass meadows and algal beds around the world.'



DR PAUL
ERFTEMEIJER

MEMBERSHIP REPORT

PIANC Australia & New Zealand is one of the largest of the 28 National Sections within PIANC International, with a growing membership of 94 corporate members and 182 individuals (including 54 student members) at the end of 2023.

Our free student member category (full time students under 30) offers reduced fees for conferences and events but without access to working group reports. Having a stronger student cohort augurs well for future participation, and has increased the profile of PIANC and the profession in the tertiary sector.

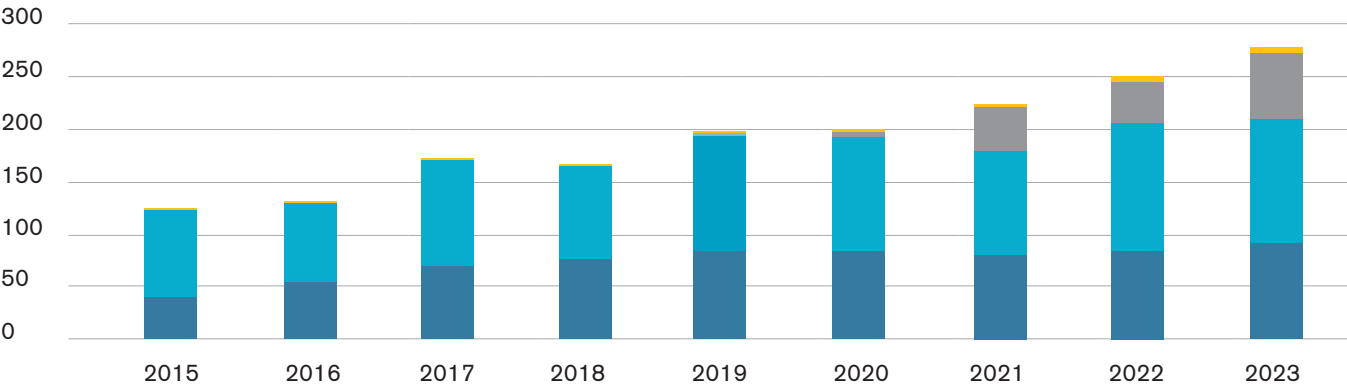
Our online membership facilities have made joining easy. Membership is open to residents of Australia, New Zealand and the Pacific Islands.

Go to: pianc.org.au/membership/

Raising the level of corporate membership remains our ideal means to provide increased engagement with our communities and is a key focus of PIANC AU-NZ moving forward.

PIANC AU-NZ MEMBERSHIP GROWTH 2015-2023

■ Corporate members ■ Individual ■ Student ■ Other



PIANC AU-NZ MEMBERSHIP

YEAR	2015	2016	2017	2018	2019	2020	2021	2022	2023
Corporate members	44	53	64	73	77	89	79	88	94
Individual	82	83	101	90	118	116	106	116	126
Student	n/a	n/a	n/a	n/a	1	3	28	45	54
Other	1	1	1	1	1	1	2	2	2
TOTAL	127	137	166	164	197	200	215	251	276

NEW MEMBERSHIP

Welcome to new Corporate Members who joined us in 2023



AW Maritime



BridgePro Engineering



Darwin Port



Duratec



Gold Coast Waterways Authority



Hychem Infrastructure



IPART (NSW)



J & P Richardson Industries



National Transport Research Organisation (NTRO)



Rightship



Soletanche Bachy International



Water Technology



Williams Metal Fabrications

CORPORATE MEMBERS



OF PIANC AU-NZ AS AT 31 DECEMBER 2023

ADVISIAN	Gold Coast Waterways Authority	Port of Melbourne Operations Pty Ltd
AECOM Australia Pty Ltd	Hall Contracting Pty Ltd	Port of Nelson NZ
AMPControl	Haskoning Australia Pty Ltd	Port of Newcastle NSW
Arup	Hatch	Port of Townsville QLD
Aspec Engineering Pty Ltd	HEB CONSTRUCTION LTD NZ	Port Taranaki Ltd. NZ
Aurecon Australasia Pty Ltd	Heron Construction NZ	Ports Australia
Australian Maritime College TAS	Hychem Infrastructure	Ports North QLD
AW Maritime Pty Ltd	Hydrobiology WA Pty Ltd	Ports of Auckland. NZ
Baird Australia	IPART NSW	Ports Victoria
Beca Ltd NZ	J & P Richardson Industries	RightShip
BESIX Watpac	Jacobs Group (Australia) Pty Ltd	Rio Tinto
BMT Commercial Australia Pty Ltd	JJ Ryan	ROVing Intelligence Pty Ltd
Boskalis Australia Pty Ltd	KBR	Royal Australian Navy
BridgePro Engineering Pty Ltd	Manly Hydraulics Laboratory	RPS Group
Burbury Consulting Pty Ltd	Marine Loading Australia Pty Ltd - trades as Ship & Shore	Salix
Cavotec NZ	Maritime Constructions	SMEC Australia Pty Ltd
Cavotec MoorMaster Ltd NZ	McConnell Dowell	Soletanche Bachy International
Centreport - Wellington NZ	Meteorological Service of New Zealand Ltd	Southern Divers
Dalrymple Bay Coal Terminal QLD	Mid West Ports Authority WA	Southern Ports Authority WA
Darwin Port. NT	MMA Subsea Pty Ltd	Stantec
Department of Environment and Science QLD	Mott Macdonald Australia	Superior Group
Department of Transport and Main Roads - Maritime Safety QLD	Napier Port NZ	Tasmanian Ports Corporation Pty Ltd
DHI Water & Environment Pty Ltd	National Transport Research Organisation (NTRO)	Thomas Miller (Australasia) Pty Ltd
Dulux Protective Coatings	NCIG	Tonkin and Taylor Ltd NZ
Duratec	North Queensland Bulk Ports	Transport for NSW, Maritime Infrastructure Delivery Office
Eastland Port NZ	NSW Ports	Trelleborg Marine & Infrastructure
Flinders Ports SA	OMC International	UNSW - Water Research Laboratory
Fortescue Future Industries	Pilbara Ports Authority WA	Wallbridge Gilbert and Aztec Pty Ltd
Fremantle Ports WA	Port Authority of New South Wales	Water Technology
Frontier Automation	Port Marlborough NZ	Wavelength Consulting Pty Ltd
FSC Range	Port of Brisbane QLD	Westport WA
GHD Pty Ltd	Port of Hastings VIC	Williams Metal Fabrications Pty Ltd
Gladstone Ports Corporation QLD		Woodside Energy Group Pty Ltd
		WSP NZ

MENTORING PROGRAM

Initiated in 2020, and coordinated by Board Member Peter Engelen, the PIANC AU-NZ Mentoring Program aims to provide members with an opportunity of giving back to their industry through sharing professional experiences and life lessons, as well as for other members to gain guidance and advice in progressing their professional career.

Recognising that many of our members have valued and varied experiences, the mentor/mentee relation can be, but is not necessarily, senior-junior in nature and instead can be one of peers across industries or across disciplines.

In 2023 our participants represented a varied cross section of members including junior and senior staff of port authorities, port managers, consultants, contractors and academia.



PETER ENGELEN

32 PARTICIPANTS FROM 22 PROMINENT ORGANISATIONS



COMMUNICATIONS REPORT



MARY O'CONNELL

In 2023 PIANC AU-NZ Comms continued to connect a growing membership and community with major e-newsletters and events-focused emails sent regularly to 2,280 member and industry contacts (at end of December 2023).



Our PIANC AU-NZ You Tube Channel established in 2020, has ten technical webinars of 60 – 90 minutes duration, and seven 2-3 minute information videos uploaded to the site – these had 3,650 views by the end of 2023.

The short information videos are also shared through our LinkedIn account– these have had over 7,500 views.

Two new short videos were produced in 2023 in collaboration with CadeDigital. One featured the activities and atmosphere of the brilliant Coasts&Ports Conference and the second video discussed the PIANC AU-NZ Shore Power Workshop.

LinkedIn remains a very effective tool for PIANC AU-NZ promotion of events, information and stories. By December 2023 we had 2,300 followers.

Check out our Annual Reports which are [available online](#).

In 2023 our website's viewing figures increased by almost two-thirds from 2022, with 13,673 individual viewers and 36,987 page views. Interestingly 40% of our viewers are outside of our region.



PIANC AU-NZ Comms team Mary O'Connell (writer) and Orcadia McCann (videographer) interviewing A/Prof Ron Cox at Coasts & Ports Conference Sunshine Coast 2023

Users by Country

PIANC AU-NZ Website Viewers 2023



COUNTRY	USERS
Australia	7.5K
United States	2K
Netherlands	561
United Kingdom	481
Finland	454
New Zealand	417
France	316



