

ATSEA

NEWSLETTER

**ATSEA Program:
A New Chapter for the
Arafura and Timor Seas**



WELCOME

TO THE ATSEA PROGRAM

The Sydney Declaration opens a new chapter of regional collaboration in the Arafura and Timor Seas (ATS). It reaffirms a shared commitment to protecting this vital marine ecosystem, in line with Article 123 of the United Nations Convention on the Law of the Sea. With this milestone, the ATSEA-2 Project has officially transitioned into the ATSEA Program, a long-term regional governance mechanism built on sustained cooperation and action.

Guided by the Strategic Action Programme (SAP) for 2024 to 2033, ATS countries are working toward a shared vision of a healthy, resilient, and productive ocean. The SAP provides a framework for collective action and promotes a blue economy approach that balances ecological health with sustainable development.

In the next decade, efforts will focus on reducing plastic pollution, including abandoned fishing gear, strengthening oil spill response, addressing small-scale Illegal, Unreported and Unregulated (IUU) fishing in transboundary waters, and protecting endangered species and habitats. These are supported by three cross-cutting priorities: climate adaptation, gender equity and social inclusion, and improved governance.

This year, ATSEA is strengthening regional coordination and aligning national actions. In the first quarter alone, the Program hosted its first Regional Workshop on Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG) in Cairns, Australia and participated in the Nature Positive Engineering Roundtable in Singapore to promote sustainable coastal protection.

To support SAP implementation, collaboration is key. Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) has taken the first step as our Strategic Development Partner (SDP), opening space for others to join. Becoming an SDP offers opportunities to expand networks, access funding and knowledge exchange, and raise the visibility of your organisation's work while contributing to shared regional and global goals.

We invite multilateral agencies, financial institutions, governments, NGOs, the private sector, and philanthropic organisations to join us as Strategic Development Partners. Together, we can ensure the ATS region remains resilient, productive, and well-governed for generations to come.

Let's turn commitment into action and forge solutions through collaboration.

Dr Handoko Adi Susanto
ATSEA interim Executive Director



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Talk to us



3rd Floor Annex Building of Tuna Research Center, MMAF
Jl. Mertasari No. 140, Sidakarya,
Denpasar 80224 Bali, Indonesia

P: +62 361 4484 147
E: infoatsea@pemsea.org
W: atsea-program.com

 [program_atsea](https://www.instagram.com/program_atsea)

 [program_atsea](https://twitter.com/program_atsea)

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ATSEA-2 Highlights: Impacts Across the Arafura and Timor Seas

Over the past five years, the ATSEA-2 Project (2019–2024) created lasting impacts across the Arafura and Timor Seas (ATS) region. Here's a closer look at what we achieved together:



Sustainable Fisheries Management

- **5 Ecosystem-based Management Plans** developed: Red Snapper and Shrimp (Aru, Indonesia), Barramundi (Merauke, Indonesia), red snapper for southern coast of Timor-Leste and ForeCoast Plan (South Fly, PNG).
- **72 small-scale fishing vessels** registered and trained to handle endangered species in Aru, Indonesia.
- **50% gear compliance** achieved among **105 boats** in South Coast, Timor-Leste.
- **New local law** enacted for artisanal fisheries in South Fly, PNG, improving sustainable practices by **10%** within few months.



Sea Turtle Conservation

- **1,200 turtles conserved** and **400 hatchlings released** through community-based conservation at Com Beach, Lautem Municipality, Timor-Leste.
- **Regional Action Plan** for Sea Turtles endorsed by Australia, Indonesia, PNG, and Timor-Leste.
- Hands-on training for **38 community members** (4 men, 34 women) in Apará and Karey, Indonesia.



Marine Protected Areas (MPAs)

- **764,564.9 hectares** of marine areas placed under improved management across Southeast Aru (Indonesia) and Nino Konis Santana National Park (Timor-Leste).
- **New MPAs** in Kolepom Island (Indonesia) which covers **356,337.90 hectares** and Manufahi-Manatuto (Timor-Leste) underway, adding **51,000 hectares** more.
- Regional MPA Network designed: covering **93 MPAs** and **271,588 km²** across the ATS.



Pollution Control and Oil Spill Preparedness

- **Early Warning System** for oil spills integrated in East Nusa Tenggara (NTT), Indonesia's Provincial Disaster Management framework.
- **Pollution Response Guidelines completed** and community trainings conducted in Betanu and Suai, Timor-Leste.
- **Task Forces** established in NTT and national studies completed to address marine pollution gaps.



Empowering Communities Through Livelihoods

- Alternative livelihood projects launched in Rote Ndao: seaweed soap (Oeseli), mangrove coffee (Daiama), massage oils (Boa), and ready-to-eat seaweed products (Landu Tii).
- Women's groups in Southeast Aru generated **up to IDR 13 million** net income per month through project-supported enterprises.
- Overall, **155,170 individuals engaged** through trainings, awareness activities, and alternative livelihoods (**44% women, 51% men**).



Climate Resilience and Coastal Management

- **Integrated Coastal Management (ICM) Plans** developed for Oeseli, Rote Ndao (Indonesia) and Barique, Manatuto (Timor-Leste).
- **Mangrove and coral restoration** carried out in 4 villages in Rote Ndao: Oeseli, Boa, Landu Tii, and Daiama.
- **Resilient Home Gardens** introduced in Barique and Manufahi (Timor-Leste) promoting farming, aquaculture, and livestock activities.



Building a Long-term Legacy

- **ATSEA Regional Governance Mechanism (RGM)** established with a new Strategic Action Programme (SAP) 2024–2033.
- Formal commitments secured through the **ATS Ministerial Declaration** signed in Sydney, Australia, on 5 December 2024.

Strengthening Regional Cooperation to Combat Ghost Nets the Arafura and Timor Seas

By Kate Gallardo



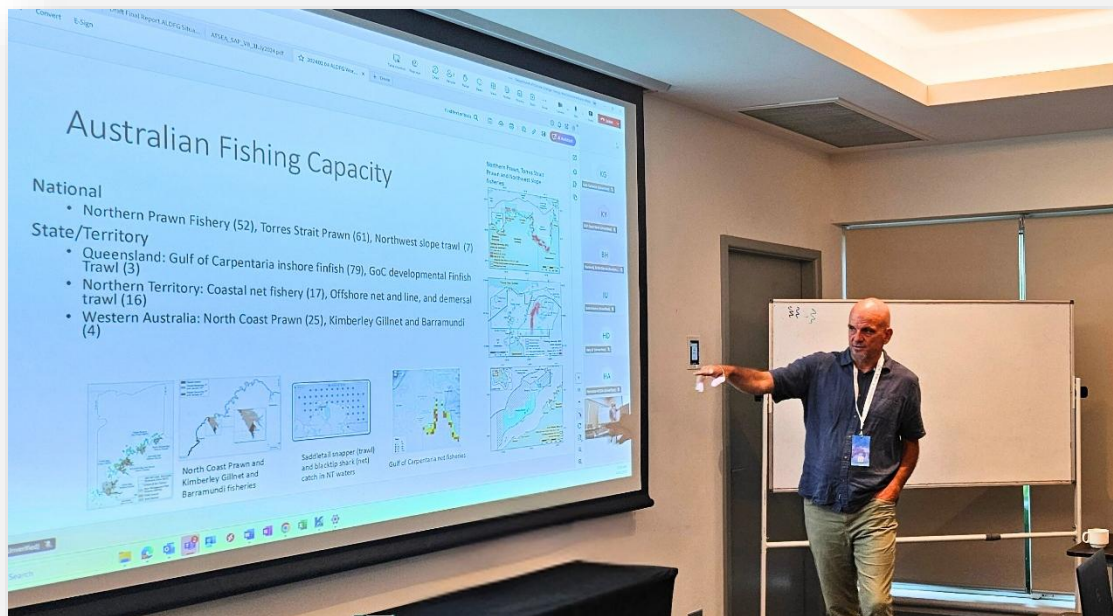
Workshop participants at the First ALDFG Regional Workshop

Abandoned, lost, and discarded fishing gear (ALDFG) silently drifts through the Arafura and Timor Seas, entangling marine life and disrupting fisheries. Known as “ghost nets,” this stray gear continues to pose a persistent threat.

Recognising this pressing issue, 32 representatives from Australia, Indonesia, Papua New Guinea, and Timor-Leste convened in Cairns, Australia from 4-7 February 2025, for the First ALDFG Regional Workshop. Hosted by the Australian Government through the Department of Climate Change, Energy, the Environment and Water (DCCEEW), the workshop aimed to strengthen regional cooperation and develop strategies to tackle ghost nets at their source.

Dr Chris Wilcox of Wilco Analytics led an updated ALDFG Situational Analysis, offering insights into sources, trends, and movement across the region. Experts from CSIRO Australia, IPB University Indonesia, and PT Winjaya Mandiri Tintex (private sector) shared additional insights, supplemented by information from the workshop participants.

Findings confirmed that all four ATS countries have coastal gillnet fisheries, which likely contribute to ALDFG accumulation. However, gear distribution varies: Australia hosts most trawl fleets, while Indonesia leads in purse seine and gillnet fisheries. The highest concentrations of ghost nets were found in Aru-West Papua, near Merauke, and the Gulf of Carpentaria (GoC).



Dr Chris Wilcox shares insights on Australia's fishing capacity and its link to ALDFG

Policy changes in Indonesia since 2015 have influenced ALDFG trends, with increased fishing activity shifting gear loss patterns. Regional data showed that loss rates of fishing gear vary by type, with trawl gear experiencing the highest loss rates, followed by purse seines, while gillnets have the lowest. Across different fisheries, loss rates range from 1% to 11%, with factors such as vessel size, mechanisation, and GPS technology which help reduce losses. Meanwhile, bottom-contact fishing gears, large crew sizes, and the use of cheaper nets tend to result in higher loss rates. Seasonal monsoons also significantly influence ALDFG movement. During the Northwest monsoon, ghost nets from the Banda Sea drift into the ATS, while inputs from the Coral Sea remain minimal.

The updated ALDFG Situational Analysis provided a foundation for designing targeted interventions during the ToC session, led by Stuart Cowell of Conservation Management. This session focused on structured, solution-driven planning and aligned with the ATS Strategic Action Programme (SAP) 2024-2033. Participants mapped out results chains, outlining step-by-step plans to connect interventions with long-term outcomes. The discussion highlighted four key priorities: improving fishing practices to reduce gear loss,

modifying gear and enhancing information sharing, collaboratively mapping high-risk areas, and expanding net recycling programs.

Building on workshop inputs, both the situational analysis and preliminary results chains will be further refined and finalised by March. These foundational efforts will serve as crucial guides towards the development of a Regional Action Plan (RAP) for ALDFG in the ATS region.

Looking ahead, workshop participants identified several key steps to advance these efforts. The final Situational Analysis and preliminary ToC reports will be shared with participating countries, followed by further consultations to finalise the ToC and define the pathway for RAP development. In-country scoping exercises will be conducted to strengthen or gather additional baseline data. A dedicated group will be established to guide ALDFG planning and initiatives, including defining its role and membership. Plans for pilot testing feasible operational interventions will be developed, and insights from these steps will be incorporated into the RAP to ensure its effectiveness and relevance.



Stuart Cowell leads a discussion on regional monitoring strategies during the Theory of Change session



Participants engage in a breakout group discussion, collaborating on strategies to address ghost nets in the Arafura and Timor Seas

Following the three-day workshop, a Ghost Nets Workshop Side Event took place on 7 February 2025, bringing together ranger groups from the Gulf region of Australia. Building on long-standing cultural and maritime ties in the Arafura and Timor Seas, the event focused on tackling the ongoing threat of ALDFG. Discussions highlighted shared challenges and community-driven solutions that can be adapted to local contexts. The session also reinforced ATSEA’s role in facilitating knowledge exchange and supporting ATS countries in developing effective national and regional strategies to address ALDFG.

The workshop reinforced a clear message that safeguarding the Arafura and Timor Seas is a shared responsibility. Collective action is key to effectively address ALDFG and protect the region’s marine resources.



ATSEA Participates in Nature-Positive Engineering Roundtable

By Dr Handoko Adi Susanto

On 18 February 2025, ATSEA took part in a full-day roundtable on Nature-Positive Engineering (NPE) at the School of Economics, Singapore Management University. This mission was supported by Lloyd’s Register Foundation. The roundtable was organised as a joint initiative by the Singapore Green Finance Center (SGFC), the International Coalition for Sustainable Infrastructure (ICSI), Lloyd’s Register Foundation, and Conservation International (CI). It brought together 40 participants (19 female and 21 male) from Singapore, Indonesia, Malaysia, the Philippines, Australia, and China. The discussions combined expert presentations, best practice case studies, and interactive dialogues to explore innovative approaches to sustainability in engineering and infrastructure.

The discussions focused on coastal protection and adaptation, addressing the increasing risks faced by coastal communities. Ports and shipping were also a major topic, ensuring that future developments in this sector align with biodiversity conservation and pollution reduction efforts. Financing and investment

challenges, gaps, and opportunities in funding nature-based solutions for coastal protection, ports, and shipping were also explored.

During the opening session, Ms. Savina Carluccio, Executive Director of ICSI, emphasised the significance of NPE and Nature-Based Solutions (NbS) as transformative strategies for addressing environmental challenges while enhancing biodiversity and ecosystem health. She highlighted that integrating ecological principles into engineering practices fosters resilience and promotes sustainable development. Discussions throughout the event identified existing challenges, gaps, and opportunities for implementing NPE.

Representing ATSEA, Dr Handoko Adi Susanto, Interim Executive Director, delivered a presentation on the transformation of ATSEA from a project-based initiative to a long-term regional collaboration. Additionally, he shared a success story from Rote Ndao, Indonesia, highlighting coastal community resilience and sustainable livelihoods. Dr Susanto also actively contributed to breakout sessions throughout the event.

ATSEA's Contribution: Lessons from Rote Ndao

Dr Susanto's presentation showcased ATSEA's successful initiatives in Rote Ndao, Indonesia, as an example of how NPE can be applied in coastal community resilience efforts. He also introduced ATSEA's ongoing transition from a project-based initiative to a long-term regional collaboration, including the promotion of the 10-Year Strategic Action Programme (SAP).

In 2021, regional assessments identified Rote Ndao as one of the most vulnerable areas in the Arafura and Timor Seas (ATS) region to oil spills, discarded fishing gear, and the impacts of climate change. A similar vulnerability was observed along the southern coast of Timor-Leste, particularly in Barique, Manatuto Municipality. These findings were further supported by localised assessments.

To enhance community resilience, ATSEA-2 worked closely with women's groups in four of the most vulnerable villages in Rote Ndao which are Boa, Oeseli, Daiama, and Landu Tii. This collaboration focused on developing alternative livelihoods, such as producing essential oil from virgin coconut oil, seaweed soap, seaweed sticks, dried fish, mangrove coffee, and seaweed syrup. Community members received training in production techniques, enterprise development, and business management, helping to diversify income sources and strengthen economic resilience.

Key Takeaways from the Roundtable

Several important insights emerged from the discussions. Establishing a shared terminology around natural capital and nature finance is essential to unlocking investment and fostering collaboration among stakeholders. Enhancing data collection is necessary to assess the long-term impact of NbS, ensuring informed decision-making and effective project design. Strengthening collaboration across sectors and disciplines is crucial for successfully implementing NbS.



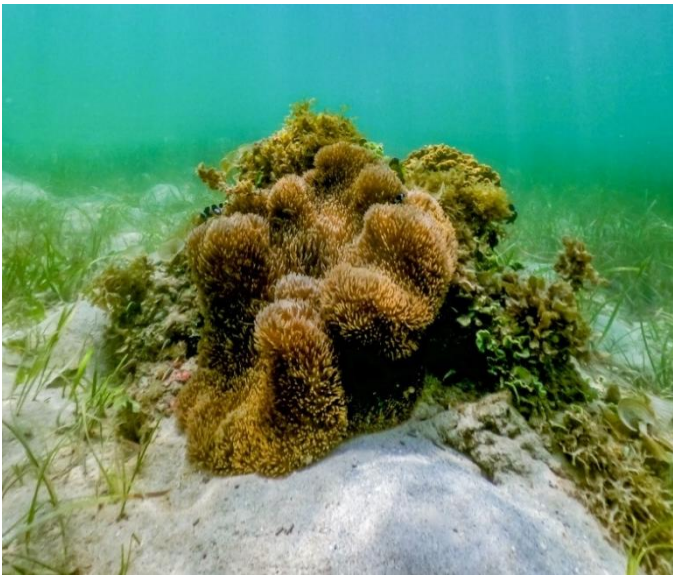
Participants exchange ideas during the roundtable on Nature-Positive Engineering

Integrating climate adaptation strategies with gender equity considerations enhances the resilience and inclusivity of coastal community solutions. Overcoming financing barriers requires more resilient financial frameworks to support nature-positive projects while maintaining economic viability.

A key theme that emerged from the discussions was the importance of hybrid solutions for storm response and coastal protection. The shared commitment to enhancing sustainable engineering practices and integrating nature-based solutions reflects the innovative thinking required to address climate resilience challenges effectively.

By participating in this roundtable, ATSEA reinforced its role in advancing nature-positive approaches and supporting long-term sustainability efforts in the ATS region. The insights gained will help inform future initiatives aimed at fostering resilience in coastal and marine environments.

DID YOU KNOW?



Seagrass forms underwater meadows that stabilise the seafloor, filter water, and provide shelter for a wide variety of marine species. As the only flowering plant that lives fully submerged, seagrass supports the early life stages of fish, sea turtles, and other important marine animals.

Seagrass ecosystems also play a key role in addressing climate change, with **the ability to absorb carbon up to 35 times faster than tropical rainforests.**¹ Healthy seagrass beds protect coastlines from erosion and sustain small-scale fisheries that many coastal communities rely on. However, these vital habitats are increasingly threatened by pollution, habitat loss, and the impacts of a changing climate.

In the Arafura and Timor Seas (ATS) region, seagrass diversity is remarkable, with **15 different species** recorded across coastal areas of Indonesia, Timor-Leste, Papua New Guinea, and northern Australia. These meadows serve as critical feeding grounds for endangered species and are essential for maintaining food security and strengthening the resilience of coastal communities. Protecting seagrass in the ATS is a key part of safeguarding both marine biodiversity and local livelihoods.

¹ For more information on the studies cited, see [McLeod et al. \(2011\)](#) and [Fourqurean et al. \(2012\)](#)



KEY EVENTS AHEAD



Our Ocean Conference (OOC) 2025 in Busan, South Korea

ATSEA will participate in the 10th Our Ocean Conference in Busan, South Korea from 28 to 30 April 2025. ATSEA interim Executive Director Dr Handoko Adi Susanto will be a speaker at a Side event led by PEMSEA and COBSEA entitled Collective Action in Implementing the 30x30 GBF Targets: Establishing a Regional Collaborative Network of Marine Protected Areas in the East Asian Seas (EAS). In addition, Dr Susanto will take part as a panelist on a side event organised by the Ministry of Ocean and Fisheries Korea entitled Marine Plastic Pollution Prevention in relation to Fisheries Management.

Before the OOC event, ATSEA will join the 10th Our Ocean Conference Pre-Conference Workshop on 26 and 27 April 2025, organised by UNOPS and COBSEA. The pre-workshop will bring together partners to advance discussions on establishing a bold, multi-agency Regional Collaborative Network of Marine Protected Areas (MPAs) for the East Asian Seas. This initiative aims to strengthen coordination, foster knowledge sharing, and support cross-country and cross-agency collaboration on MPA efforts across the region.

24th Annual Large Marine Ecosystems Consultant Meeting (LME24) in Athens, Greece

ATSEA will participate in LME24 consultative meeting to share experiences on ecosystem-based management (EBM) of Large Marine Ecosystems (LMEs) and ocean governance. The 24th LME meeting will take place in Athens, Greece from 14 to 16 May 2025, and organised by IOC/UNESCO IWLEARN. ATSEA interim Executive Director, Dr Handoko Adi Susanto will deliver a presentation about key milestones of ATSEA and its lessons learned in Session 2A - Progress in LME Implementation on the first day of the meeting.

Regional Coordination Committee (RCC) Meeting, June 2025

The ATSEA RCC will meet virtually in June 2025 to review progress and follow-up actions in implementing the 2025 work plan and budget, as endorsed at the First RCC Meeting in December 2024. Discussions will include key actions in operationalising the ATSEA Regional Governance Mechanism (RGM), as well as progress and opportunities under the Arafura and Timor Seas Strategic Action Programme (SAP) 2024–2033 and the supporting National Action Programmes (NAPs).



ATSEA Regional Secretariat

📍 Jl. Mertasari No. 140 Sidakarya,
Denpasar 80224, Bali, Indonesia

☎ +62 361 448 4147

✉ infoatsea@pemsea.org

🌐 www.atsea-program.com