

DECARBONISATION OF ELECTRICITY GENERATION ON PHILIPPINE ISLANDS (USING TIDAL STREAM ENERGY AND SOLAR PV)

NAMA* SUPPORT PROJECT (NSP)
*NATIONALLY APPROPRIATE MITIGATION ACTION

VIRTUAL WEBINAR WITH OEE MEMBERS

18 February 2022

PARTICIPANTS

Members of Ocean Energy Europe

APPLICANT SUPPORT PARTNERS

Frankfurt School of Finance & Management, IZN, Ocean Pixel



Frankfurt School
FS-UNEP Collaborating Centre
for Climate & Sustainable Energy Finance



AGENDA

Time (CET)	Topic	Presenter
10:00 - 10:10	Introduction of NAMA Support Team members	<ul style="list-style-type: none">▪ Rémi Gruet▪ Madhumitha Madhavan (Maddy)
10:10 - 10:30	About NAMA Programme <ul style="list-style-type: none">▪ Overview▪ Timelines▪ Financing example▪ Eligibility criteria	<ul style="list-style-type: none">▪ Maddy▪ Elke Hellstern▪ Peter Wefers▪ Rolf Seifried▪ Mike Abundo
10:30 - 11:00	Discussion: Q&A session	All

Maddy will moderate the session together with Rémi Gruet

OVERVIEW | NSP CONCEPT AND OBJECTIVES

- The NAMA Facility has selected the NSP “Decarbonisation of Electricity Generation on Philippine Islands” for the Detailed Programme Preparation (DPP) phase.
- The overall objective of the NSP is to open-up the market for TSE*/PV projects with battery storage in the off-grid islands of the Philippines and to bridge the financing gap for new RE technologies

The NSP targets to install in total 50MW via. TSE/PV

Align with National Climate Change Action Plan

Philippines’ Nationally Determined Contribution (NDC) targets a 75% reduction of GHG emissions by 2030 compared with a BAU scenario

Kick-start transformational change in off-grid islands

Enabling larger Tidal Stream Energy projects to be implemented

Substitute fossil-based gensets

Thereby de-carbonising the Philippines off-grid islands

Address key investment barriers

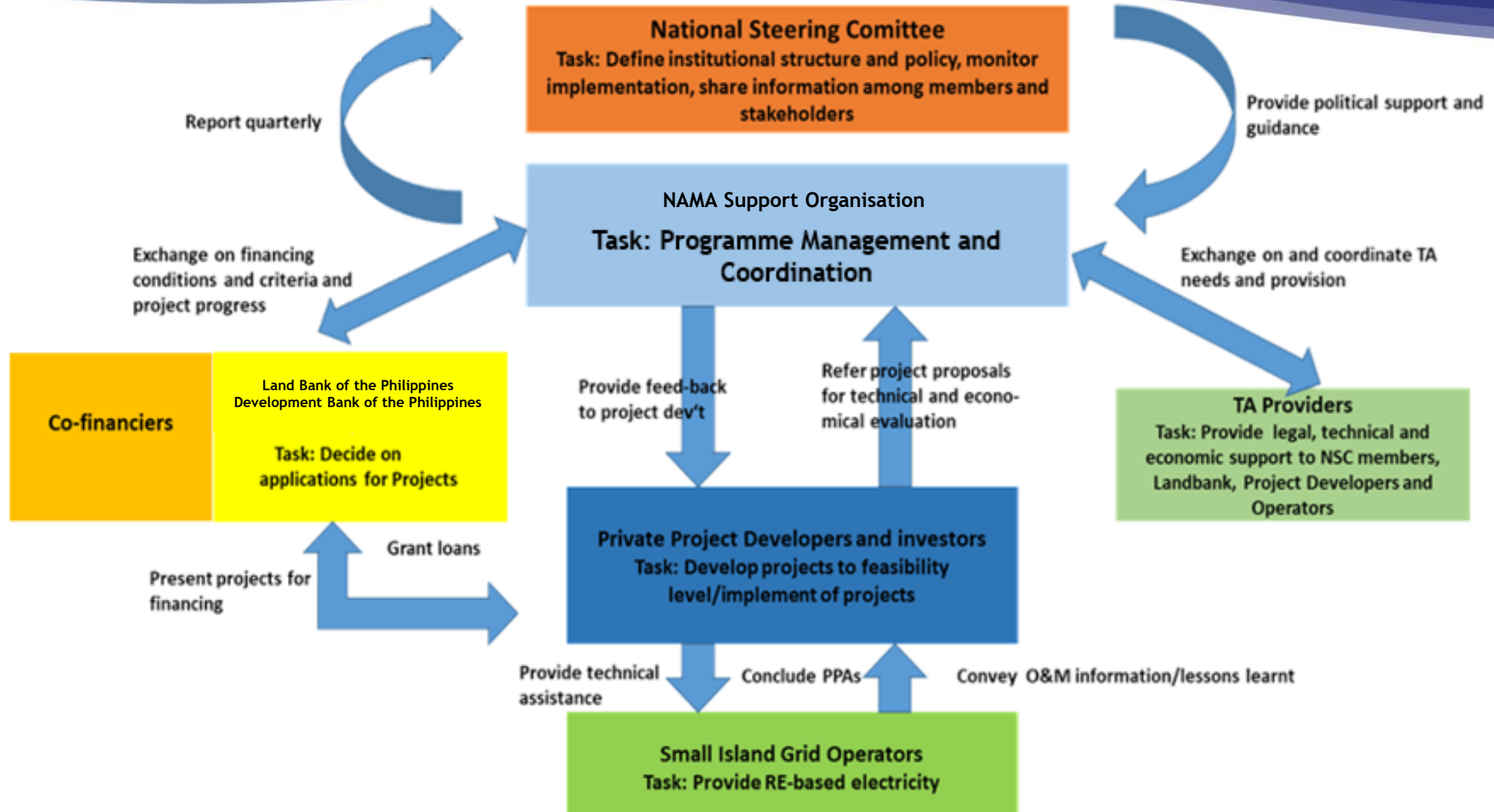
Availability of NSP grants enables banks to provide long-term concessional loans

Reduce debt service obligations for investors

NSP grants reduce the debt component in the overall structure, thereby decreasing debt service obligations

*TSE = Tidal Stream Energy; BAU** = Business As Usual

INSTITUTIONAL STRUCTURE | NSP IMPLEMENTATION



TIMEFRAME | PREPARATION PHASES & OUTPUTS



Preparation Phase I - Results:

- Detailed financing mechanism and underlying business cases
- Detailed market analysis including a) TSE developers, manufacturers and investors and b) energy demand and supply of projects on the islands
- **Consolidated project pipeline**
- Political and legal framework
- Required technical assistance measures of relevant stakeholders
- Analysis of potential risks to environment, society, human rights and gender

Preparation Phase II - Results:

- Consolidate findings and finalise NAMA Support Project (NSP) Proposal

TIMEFRAME | IMPLEMENTATION PHASES & OUTPUTS

First quarter 2023

First quarter 2024

First Mover Phase

Project capacity TSE/PV **1-3 MW**

- ✓ One to three Projects which are in an advanced* stage of preparation, **will enjoy access to concessional debt financing.**
- ✓ These projects shall **in addition** benefit from a significant grant contribution of ca. 30% of CAPEX

Tentative
indication of size

Main Programme Phase

Several projects ranging from **1-5 MW** each

- ✓ **Subsequently** selected projects also enjoy access to concessional debt financing and grant contribution (TBD % of CAPEX).

The NSP targets to install in total 50MW via. TSE/PV

*Advanced stage - please see next slide

ELIGIBILITY CRITERIA

1

Minimum conditions:

Minimum and maximum of installed generation capacity per project (tentative indication)

First Mover Phase: 1 - 3 MW

Main Programme Phase: 1 - 5 MW

Pertinent eligibility criteria will be used to ensure that only well-advanced* projects are supported by NSP grants.

2

Minimum TSE component in terms of installed generation capacity (MW): > 35%

”Advanced stage” implies the following:

3

Project readiness

(further conditions precedent of partner bank to be observed)

- **First Mover Projects:** Service contract & feasibility study available, ESIA completed
- **Subsequent projects:** Service contract available

4

Technical criteria

(for all NSP supported projects)

- **Technology** open (e.g. floating, tidal kite seabed mounted tidal services)
- **Technical Readiness Level (TRL)**, min. TRL 8 (system complete & qualified)

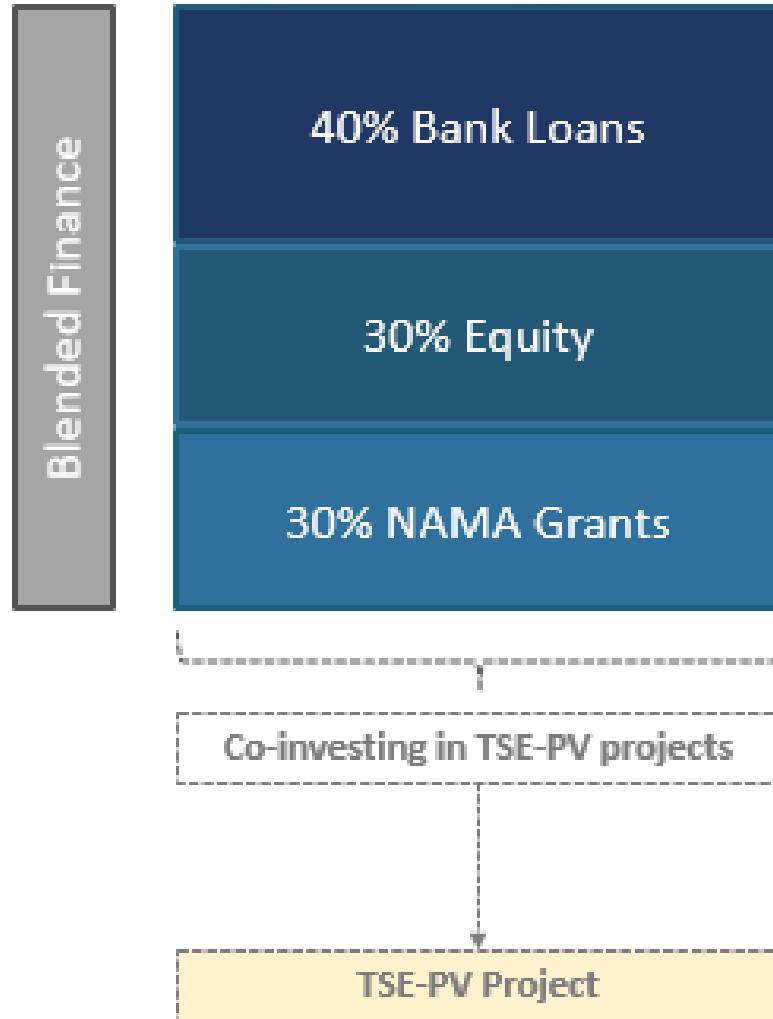
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Conditions precedent for a loan disbursement by Philippine banks (LBP, DBP)

- a) Feasibility study
- b) Detailed engineering design
- c) ...

(Please refer to Eligibility Criteria PDF for detailed list)

BRIDGING THE FUNDING GAP



- ✓ The availability of NAMA Facility grants enables Philippine Development Banks to include TSE in their RE financing portfolio as the grants help reduce the risk perception of “First of its kind” projects
- ✓ NAMA Facility grant funds will be blended with concessional loans from development banks in the Philippines. This will reduce debt and debt service obligations for local and international private investors.

ADDITIONAL SUPPORT MECHANISMS

Government Incentives

The government of the Philippines is providing tax incentives for investors (tax holidays and duty-free imports) and a subsidy regime that covers the gap between low tariffs in off-grid areas and true costs of generation.

Concessional loans for NSP supported projects

Our prospective partner banks in the Philippines offers the following indicative terms for loans in local currency (PHP):

- Tenor: up to 15 years,
- Interest rate: 6% - 9% p.a. (before blending)
- Grace period: up to 3 years
- Equity requirement: 30% of CAPEX (20% for customers with positive credit history)

Extending loans to NSP projects

For extending loans to NSP supported projects, the bank requires among others a Declaration of Commerciality, a Power Supply Agreement with local authorities and a feasibility study as conditions precedent.

First mover projects could benefit from a higher grant element than subsequent projects.

IMPLEMENTING PARTNERS OF THE NSP

Government:

- Department of Energy (DoE) and Climate Change Commission (CCC)
- Energy Regulatory Commission (ERC)
- National Electrification Administration (NEA)
- Association of Isolated Electric Co-operatives (AIEC)
- National Power Corporation (e.g. NPC-SPUG)
- Relevant Electric Cooperatives

Non-Government:

- Land Bank of the Philippines (LBP) - main financing partner
- Ocean Energy Europe (OEE) - technology partner
- OceanPixel - technical partner
- Marine Environment and Resources Foundation (MERF) - NSO partner

DISCUSSION OF OPEN POINTS



THANK YOU FOR YOUR PATIENCE

Website: [Philippines - Decarbonisation of Electricity Generation on Philippine Islands - Using Tidal Stream and Solar PV \(nama-facility.org\)](http://nama-facility.org)



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