

INDICATIVE PROJECT PIPELINE
(\$ million)

	Approval	Country	ADB	Co-fin	Gov	Total	Scope
1.	2017	Cook Islands ^a	0	12	4	16	Battery storage
2.	2017	Tonga ^b	3	4	0	7	Renewable energy for outer islands
3.	2017	Vanuatu ^c	5	7	3	15	Brenwe Hydropower Project
4.	2018	Tonga	14	60	3	77	Battery storage, grid rehabilitation, solar and wind, off-grid hybrid systems
5.	2018	Republic of Marshall Islands	9	16	2	27	Distribution upgrades, grid connected solar and tank farm rehabilitation
6.	2018	Federated States of Micronesia Yap State	1	15	1	17	Grid-connected solar battery storage, hybrid systems, risk guarantee
7.	2018	Federated States of Micronesia Pohnpei State	1	55	12	68	Grid-connected solar and wind, battery storage, hybrid systems, risk guarantee
8.	2018	Federated States of Micronesia Chuuk State	1	23	1	25	Grid-connected solar and wind, battery storage, hybrid systems, risk guarantee
9.	2018	Federated States of Micronesia Kosrae State	1	13	1	15	Grid-connected solar and wind, battery storage, hybrid systems, risk guarantee
10.	2019	Nauru	4	24	2	30	Grid connected solar, battery storage transmission upgrades
11.	2019	Samoa	10	48	5	63	Hydropower, grid connected solar, battery storage
12.	2019	Palau	6	1	0	7	Renewable energy
13.	2019	Vanuatu	7	3	0	10	Renewable energy
Total			62	281	30	377	

a. Green Climate Fund approved \$12 million co-financing in December 2016, administered by ADB.

b. GEF funding was approved on 19 April 2016 for \$2.89 million. Discussions are ongoing with the potential bilaterals for additional co-financing.

c. \$7 million cofinancing has been approved by the *Scaling Up Renewable Energy Program in Low-Income Countries* financed by the Strategic Climate Fund. Administered by ADB.

Project Summary
Anticipated 2017 Pacific Renewable Energy Investment Facility Approvals

1. A summary of projects proposed for inclusion under the Facility approval process, which are anticipated for approval in 2017, are presented below.

2. **Project 1: Cook Islands. Additional Financing to the Renewable Energy Sector Project.** The proposed additional financing to the Renewable Energy Sector Project consists of installation of battery storage on the Rarotonga grid to allow upscaling of private sector investment in renewable energy, including (a) 1MW/4MWh battery storage for grid stability, to be installed at the diesel power station; (b) 2MW/8MWh for load shifting capability, to be installed at the Rarotonga airport, and (c) capacity building activities for power utilities and government departments. This additional battery storage capacity will allow the Cook Islands to upscale an additional 6 MW of solar power capacity through private sector investment to be connected to the grid, after which the Cook Islands' national electricity supply will be approximately 50% renewable energy. The project is included in the Cook Islands Renewable Energy Chart and Implementation Plan (CIRECIP) which establishes a target of 100% renewable electricity by 2020. Cofinancing approval was received by the Green Climate Fund Board in December 2016 for \$12 million. The anticipated financing plan is presented below:

Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Green Climate Fund (grant) ^a	12.0	75.0
Government	4.0	25.0
Total	16.0	100.0

Source: Asian Development Bank

^a. Administered by the Asian Development Bank

3. Due diligence is currently being finalized. Safeguard categorization is currently category B for environment, category B for involuntary resettlement, and category C for indigenous peoples. The ADB President approval is scheduled for August 2017.

4. **Project 2: Tonga. Additional Financing to the Outer Island Renewable Energy Project.** On 19 April 2016, the GEF chief executive officer cleared the project concept with the grant amount of \$2.89 million. As per government's request, the GEF grant will be used for building a solar mini-grid system on Niuatoputapu of the Niua group. The proposed components are included in the Tonga Energy Road Map, 2010–2020 (TERM), which establishes the national target of generating 50% of all electricity from renewables by 2020. The indicative financing plan for the project is presented below:

Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Concessional OCR Lending	1.5	22.0
Asian Development Fund (grant)	1.5	22.0
Cofinancier (TBD)	1.0	15.0
Global Environment Facility	2.89	42.0
Total	6.89	100.0

TBD = to be determined

Source: Asian Development Bank

5. Due diligence is currently being finalized. Safeguard categorization is category B for environment, category C for involuntary resettlement, and category C for indigenous peoples. ADB Board approval is scheduled for September 2017.

6. **Project 3: Vanuatu: Energy Access Project.** The project will increase energy access and renewable energy generation in the two islands of Espiritu Santo and Malekula, Vanuatu. The outputs of the project include:

- (i) Brenwe Hydropower Plant. A 400 kW run-of-river hydropower plant will be constructed, including (a) a total of 2 km of access roads, (b) a 21 km transmission line (20 kilovolts), (c) an intake structure, (d) a 1.0 km headrace canal, (e) a 190-meter steel penstock, and (f) a powerhouse. The Brenwe hydropower plant will provide in excess of 90% of the total generated energy for the Malekula grid through to 2040.
- (ii) Distribution grid extension. The grid will be extended to an estimated additional 1,050 households. This will increase the grid access rate from 8% to 14% in Malekula and from 22% to 29% in Espiritu Santo. The project will finance 79 km distribution lines, step-down transformers and poles.
- (iii) Capacity building. Newly connected households will be trained on options for electricity-based income generation, electricity safety, and budget management.

7. The project is included in the Vanuatu National Energy Road Map (NERM) 2014 as a priority investment. Cofinancing approval has been received from the Strategic Climate Fund. The anticipated financing plan is presented below:

Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Concessional OCR Lending	2.5	16.6
Asian Development Fund (grant)	2.5	16.6
Strategic Climate Fund (grant) ^a	7.0	46.3
Government	3.1	20.5
Total	15.1	100.0

Source: Asian Development Bank

^a. Under the Scaling Up Renewable Energy Program in Low-Income Countries financed by the Strategic Climate Fund. Administered by the Asian Development Bank.

8. Due diligence is currently being finalized. Safeguard categorization is category B for environment, category B for involuntary resettlement and category C for indigenous peoples. ADB Board approval is scheduled for August 2017.