

NS-325 - Samoa Transport Sector NAMA

Samoa

NAMA Seeking Support for Implementation

A Overview	
A.1 Party	Samoa
A.2 Title of Mitigation Action	Samoa Transport Sector NAMA
A.3 Description of mitigation action	The Samoa Transport Sector NAMA is in line with the Samoa's Nationally Determined Contribution (NDC) and aim to achieve economy-wide emissions reduction on external international assistance and increase use of renewable energy within the economy. This NAMA also supports Transport Sector Plan (TSP) and outcomes of Strategy for the Development of Samoa (2016-2017) i.e. "Transport Systems & Networks Improved" with a vision of "A sustainable, safe, environmentally responsible transport network that supports Samoa's economic and social development". The NAMA will reduce direct GHG emissions by replacing the fossil fuel with bio-diesel and introducing electric vehicles (Cars, Mini-buses and buses) in the transport sector. The NAMA will not only support the decarbonisation of Samoa's transport sector but will also have economy wide impact by reducing the national fuel import bill, increasing local sector participation and other sustainable development (SD) benefits, such as improvement of the situation of groups with specific vulnerabilities, women and the youth. The NAMA covers three interventions. Under Intervention 1-Scaling-up bio-diesel use in diesel vehicles; the proposed NAMA intervention 1 will trial using biodiesel trucks, 25 vans and 25 small trucks owned by government and private owners in Samoa. The funding for the NAMA will cover the capital costs for installation of a biodiesel production plant, supply chain including sales and monitoring and to cover the initial subsidy component to make biodiesel economic and then for the project over a number of years. Intervention 2 - Introduction of electric cars: For this NAMA intervention 100 electric cars will be operated and trialled as taxis as a pilot phase. Similar to other interventions worldwide, the aim of pilot phase is to check upscaling viability and acceptability, generate awareness about electric cars including highlighting its benefits for the transport sector and to provide support and maintenance facilities for the vehicles. The funding for this phase of the NAMA Intervention 2 will cover the capital costs for electric cars, charging stations and capacity building measures. Intervention 3 - Introduction of electric buses for public transport: Under this intervention 10 electric buses (2 Large and 8 Mini buses) will be trialled in Samoa for public transport. Similar to other interventions, the aim of pilot phase is to check upscaling viability, support needed and acceptability. In addition to generate awareness about electric buses for public transport including highlighting its importance for the transport sector. The funding for this phase of the NAMA Intervention 3 will cover the capital costs for electric buses, charging stations spares and capacity building measures. In its pilot phase, the Samoa transport sector NAMA will provide the sustainable transport services to the Upolu and Savai'i Islands of Samoa. Over the 15-year pilot phase, emission reductions will reach around 61,305 tons of CO₂e. Another important component will be financial and technical support during the implementation of the private sector, as the aim is to create investment environment for sustainable transportation and low carbon technology in Samoa. Capacity-building will be a key component in the implementation of the NAMA. Special emphasis will be given to identifying and supporting the private sector in the implementation of NAMA interventions in Samoa. The development and implementation of the Samoa Transport NAMA will require capacity building and support for the institutions involved, government ministries and institutions as well as various stakeholders like private bus operators, taxi owners and operators, ancillary service providers, financial institutes, NGOs etc. It will also need the development of outreach programs in order to incite interest within the private sector for the NAMA along with campaigns marketing the interventions to generate awareness and interest in the adoption and utilization of electric vehicles within the country. The baseline scenario for this NAMA consists of two components, a GHG baseline and a sustainable development (SD) baseline. Setting the baseline scenario allows all effects to be properly assessed and quantified through the monitoring activities described in the Measurement, Reporting and Verification (MRV) system under the UN Framework Convention on Climate Change's (UN-FCCC) "Small-scale Methodologies: AMS-III.AK: Biodiesel production and use for transport applications and AMS-III.C: Emission reductions by electric and hybrid vehicles will be used to monitor GHG emission reductions. The sustainable development indicators have been identified in the Sustainable Development Evaluation Tool (SD Tool) developed by UNDP and monitored by the defined MRV protocol. The total cost of the NAMA is estimated at around US\$11.62 million. This includes support to cover the investment costs of the three interventions as well as capacity-building efforts. The transport sector NAMA interventions selected for Samoa are cost intensive and given a limited financial capacity of Government and private sector in the country, the NAMA financing is expected to come from NAMA donors. However, Govt of Samoa would provide the supportive structural policies to successful implementation of NAMA. Implementation of the NAMA will be led by the Ministry of Natural Resources and Environment (MNRE) as the NAMA Coordinating Authority (NCA). The NAMA Coordination Committee (NECC) will act as National NAMA Approver and Focal Point (NA) and Focal Point to the UNFCCC. The role of NAMA Implementing Authority will be taken by the Energy Policy and Coordination division, Ministry of Finance will take up the role of NIE in association with LTA and MWTI.
A.4 Sector	☐ Energy supply ☒ Transport and its Infrastructure ☐ Residential and Commercial buildings ☐ Industry ☐ Agriculture ☐ Forestry ☐ Waste management ☐ Other
A.5 Technology	☐ Bioenergy ☒ Cleaner Fuels

	☐ Energy Efficiency	☐ Geothermal energy
	☐ Hydropower	☐ Solar energy
	☐ Wind energy	☐ Ocean energy
	☐ Carbon Capture and Storage	☐ Low till / No till
	☐ Land fill gas collection	
	☒ Other	Electric Vehicles (EVs)
A.6 Type of action	☒ National/ Sectoral goal	☒ Project: Investment in machinery
	☐ Strategy	☐ Project: Investment in infrastructure
	☐ National/Sectoral policy or program	☐ Project: Other
	☐ Other	
A.7 Greenhouse gases covered by the action	☒ CO2	☐ CH4
	☐ N2O	☐ HFCs
	☐ PFCs	☐ SF6
	☐ Other	

B National Implementing Entity

B.1.0	Name	Renewable Energy Division, Ministry of Natural Resources and Environment
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B.1.9	Contact Person 3	
B.1.10	Address	
B.1.11	Phone	
B.1.12	Email	
B.1.13	Comments	

[Add Additional Entity](#)

C Expected timeframe for the implementation of the mitigation action

C.1	Number of years for completion	4
C.2	Expected start year of implementation	

D Currency

D.1	Used Currency	USD ▼
	Conversion to USD: 1	

E Cost

E.1.1	Estimated full cost of implementation	11,621,743
	Conversion to USD: 11,621,743	
E.1.2	Comments on full cost of implementation	The full cost of implementation includes extensive capacity development support and capital investment for interventions.
E.2.1	Estimated incremental cost of implementation	
	Conversion to USD: 0	
E.2.2	Comments on estimated incremental cost of implementation	

F Support required for the implementation the mitigation action

F.1.1	Amount of Financial support	11,621,743
	Conversion to USD: 11,621,743	
F.1.2	Type of required Financial support	☒ Grant
		☐ Guarantee
		☐ Loan (sovereign)
		☐ Equity
		☐ Loan (Private)
		☐ Carbon finance
		☐ Concessional loan

☐ Other

F.1.3 Comments on Financial support

The implementation shall be started within 6 months of financial assistance.

Out of the total amount of financial support (USD 11,621,743 shown in the table below), USD 8,828,743 is sought as the technological support and USD 2,793,000 is for capacity building support.

S.No.	Samoa Transport Sector NAMA Intervention	Cost (U
1	Scaling-up the Bio-diesel use in Diesel Vehicles	2,146,;
2	Introduction of electric cars	5,614,;
3	Introduction of electric buses for Public Transport	3,861,;
Total Cost		11,621,

F.2.1 Amount of Technological support

F.2.2 Comments on Technological support

The Technology Cost (**USD 8,828,743.00**) includes the cost of intervention and O&M for the pilot phase. The technology support cost is already included in the Financial Support need as mentioned above in F.1.1

F.3.1 Amount of capacity building support

Conversion to USD: 0

F.3.2 Type of required capacity building support

- ☒ Individual level
☒ Institutional level
☒ Systemic level

☐ Other

F.3.3 Comments on Capacity Building support

The technology support cost (USD 2,793,000.00) is already included in the Financial Support need as mentioned above in F.1.1

Capacity-building will be a key component in the implementation of the NAMA. Special emphasis will be given to identifying and supporting the private sector implementation of NAMA interventions in Samoa. The development and implementation of the Samoa Transport NAMA will require capacity building and institutions involved, government ministries and institutions as well as various stakeholders like private bus operators, taxi owners and operators, ancillary service providers, financial institutes, NGOs etc. It will also need the development of outreach programs in order to incite interest within the private sector for the NAMA along with campaigns marketing the interventions to generate awareness and interest in the adoption and utilization of electric vehicles within the country.

G Estimated emission reductions

G.1 Amount

0.0613

G.2 Unit

MtCO₂e

G.3 Additional information (e.g. if available, information on the methodological approach followed)

S.No.	Samoa Transport Sector NAMA Intervention	Emission Reductions (tCO ₂ e)
1	Scaling-up the Bio-diesel use in Diesel Vehicles	1,347
2	Introduction of electric cars	2,638
3	Introduction of electric buses for Public Transport	102
Total Annual GHG Emission Reduction		4,087
GHG Emission Reduction for 15 years		61,305

The GHG emission reductions from the NAMA interventions are based on the UNFCCC approved Small Scale Methodologies.

The GHG emission reduction from intervention 1- scaling up the bio-diesel use in diesel vehicles shall be calculated as per the Clean Development Mechanism approved small scale, baseline and monitoring methodology, "AMS-III.AK: Biodiesel production and use for transport applications".

The GHG emission reduction from intervention 2 and intervention 3 shall be calculated as per the Clean Development Mechanism approved small scale and monitoring methodology, "AMS-III.C: Emission reductions by electric and hybrid vehicles". This methodology was found to be most suitable and used to determine the emissions in baseline as well as NAMA scenario.

H Other indicators

H.1 Other indicators of implementation

The coordination and management of the NAMA requires an institutional structure, which shall meet the following requirements.

- It must be embedded in national and sectoral policies and strategies.
- It must be capable of effective communication and reporting as required by international agencies, such as the UNFCCC.
- It must provide an interface to international bilateral and multilateral NAMA funding entities, such as the Green Climate Fund.
- It must be able to ensure proper management of financial flows between the NAMA funding entities and the recipients.
- It must be able to ensure the achievement of NAMA targets in terms of electrification, GHG mitigation and sustainable co-benefits.
- It must be able to allow transparent monitoring of GHG emission reductions and the Sustainable Development indicators.

The recommended institutional structure of the NAMA is based on the following principles.

- Ensuring the strong involvement of national stakeholders to create country ownership and political commitment.
- Using existing and experienced entities organizational systems which are already in place and allow for prompt and smooth implementation of the NAMA.
- Ensuring that the institutional structure is appropriate for the receipt of international private and/or public donor funding.
- The institutional structure for the NAMA shall include the following institutional bodies at the country level: i) a National NAMA Approver and Focal Point NAMA Coordinating Authority (NCA); iii) a NAMA Implementing Entity (NIE) and iv) NAMA Executing Entities (NEEs).

I Other relevant information

I.1 Other relevant information including co-benefits for local sustainable development	In addition to GHG emissions, the MRV system for this NAMA will monitor the impact of the NAMA interventions on selected Sustainable Development (SD) indicators. The selection of the SD indicators was done using the Sustainable Development Evaluation Tool (SD Tool) developed by UNDP (UNDP, 2014d). The SD Tool divides indicators into four different domains: environment; social; growth and development; and economic.
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J Relevant National Policies strategies, plans and programmes and/or other mitigation action

J.1 Relevant National Policies	Strategy for the Development of Samoa (2016-2020), Samoan Transport Sector Plan (TSP) 2014-2019, Samoa Energy Sector Plan(2017-2022) and the Environment Sector Plan (2017-2021)
J.2 Link to other NAMAs	(none)

K Attachments

K	Attachments	Title Description
K.1	Attachment description	No records to display.
K.2	File	Choose File No file chosen

L Support received

L.1	Outside the Registry											
L.2	Within the Registry	<table><tr><th>Support provided</th><th>SupportType</th><th>Amount</th><th>Comment</th><th>Date</th></tr><tr><td colspan="5">No records to display.</td></tr></table>	Support provided	SupportType	Amount	Comment	Date	No records to display.				
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