Environmental and Social Screening Report: Installation of approx. 37 MWh Battery Energy Storage Systems in ARISE phase 1 and 2 islands.

The Screening Report must include a copy of the technical engineering design for the proposed intervention (where available), at least preliminary concept and description of the proposed project activity.

A. Description of Intervention

Project Identification

Project title	Installation of approximately 37 MWh Battery Energy Storage System (BESS) in ARISE project phase 1 and phase 2 islands (Addu City, Fuvahmulah City, Kulhudhuhfushi City, Thinadhoo, Eydhafushi, Hinnavaru, Naifaru, Funadhoo, Isdhoo-Kallaidhoo-Dhanbidhoo, Maabaidhoo, Gan, Fonadhoo, Maamendhoo, Kunahandhoo, Hithadhoo, Maavah, and Villingili)
Project Proponent	Ministry of Environment Climate Change and Technology.

Project Location

Location	The BESS are to be located within the Powerhouse premise of all islands.  FIGURE 1 EYDHAFUSHI BESS LOCATION

	 Figure 2 Kulhudhuhfushi BESS Location  Figure 3 Thinadhoo BESS Location

Figure 4 Fuvahmulah BESS Location

Figure 5 Addu BESS Location

FIGURE 6 BESS LOCATION IN HINNAVARU

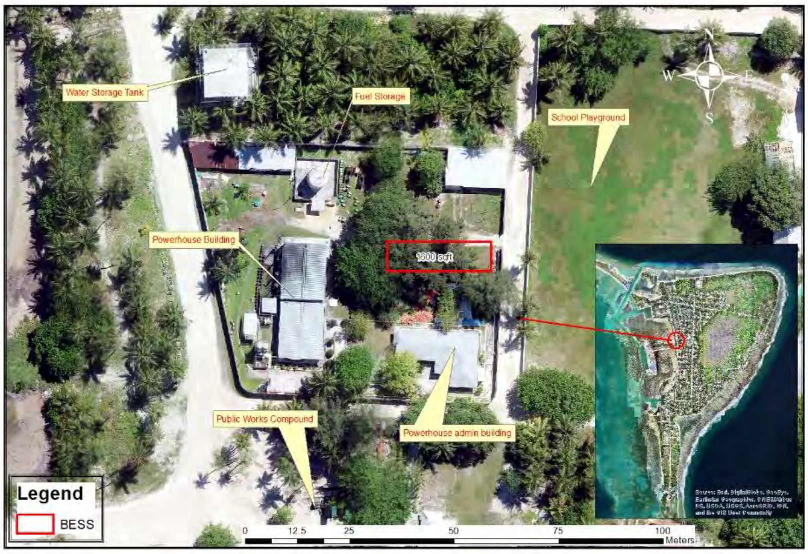


Figure 7 BESS Location at HulhudhooMeedhoo

Figure 8 BESS Location Sh.Funadhoo

FIGURE 9 BESS LOCATION GA. VILLINGILI

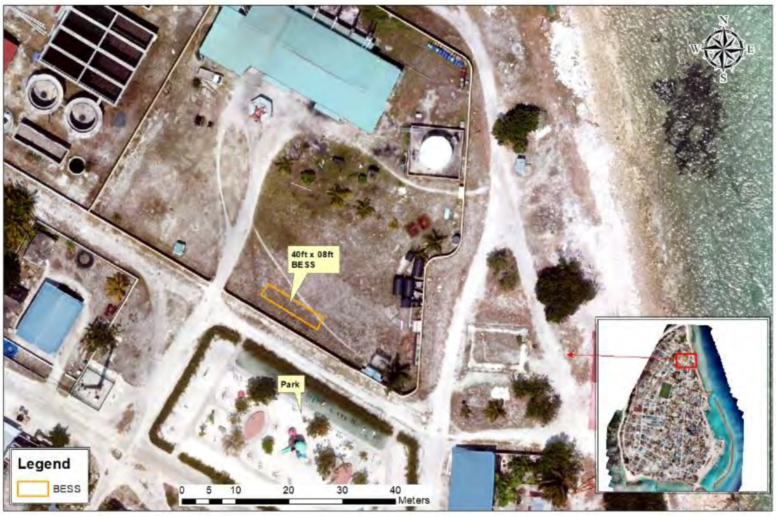


FIGURE 10 BESS LOCATION LH.NAIFARU

FIGURE 11 BESS LOCATION L.FONADHOO

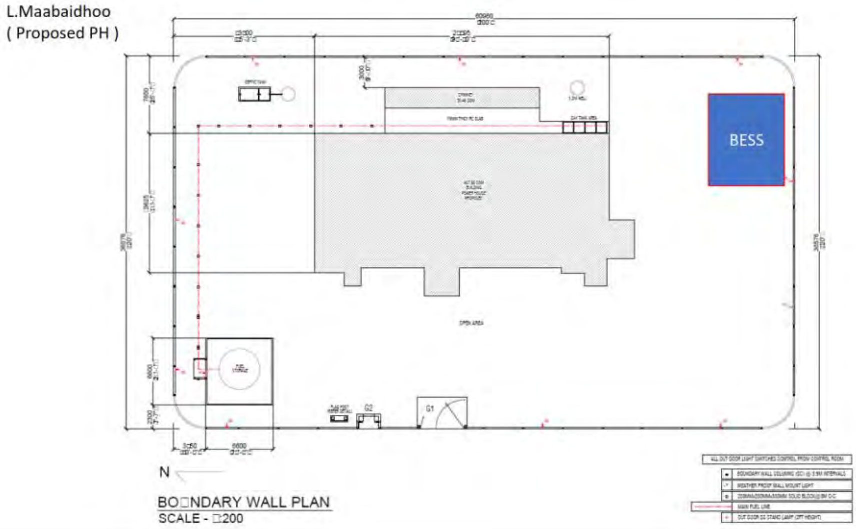


	 Figure 12 Location of BESS/New Powerhouse L.Maabaidhoo 

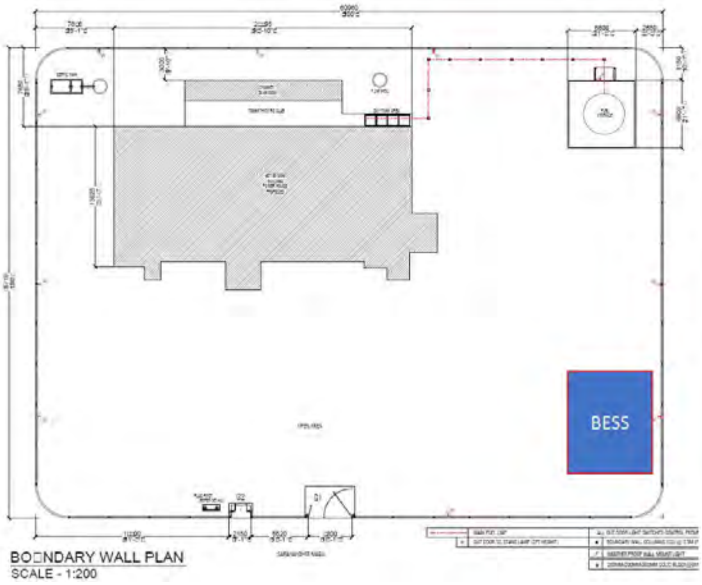
	 FIGURE 13 LOCATION OF BESS/NEW POWERHOUSE L.ISDHOO-KALLAIDHOO-DHANBIDHOO CENTRAL POWERHOUSE IN KALLAIDHOO L.Kunahandhoo (Proposed PH) 

FIGURE 14 LOCATION OF BESS/NEW POWERHOUSE L.KUNAHANDHOO

FIGURE 15 LOCATION OF BESS L.MAAVAH

FIGURE 16 LOCATION OF BESS L.MAAMENDHOO

FIGURE 17 LOCATION OF BESS L.HITHADHOO

	 Figure 18 Location of BESS L.Gan Note full scale images are provided in Annex.
Definition of Project Area *(The geographical extent of the project & areas affected during construction)*	In all the islands the BESS is located within the Powerhouse Location. The area affected is also the powerhouse location. Thus, the affected area in all islands will include, the main powerhouse for each island, fuel storage area and administrative office of the powerhouse. As an alternative site the small section of the site approved for PV installation can be considered, however above is considered as the primary site.
Adjacent land and features	For each island areas within close proximity of the powerhouse location are described below: 1. Eydhafushi: Close to the Powerhouse there is the Dhiraagu plot, sports pitches, residential areas and sewerage system related infrastructure (Figure 1). All these areas are within 05 to 10 meters of the powerhouse plot. 2. Kulhudhuhfushi: Close to the Powerhouse there is the waste management location, sports pitches and public works construction site (Figure 2). These sites are within 05 to 10 meters of the powerhouse plot. 3. Thinadhoo: Close to the site are the desalination plant, public works area, small wetland area and residential buildings (Figure 3). All these sites are within 05 to 10 meters of the powerhouse plot. 4. Addu (Mainland): Close to this location is Addu Port Area (Figure 5). There is no residential settlements nearby this site. 5. Addu (Hulhudhoo-Meedhoo): Close to the location are residential developments, Playground of the school, Water storage tank and Public Works work site (Figure 7). All these areas are within 05 to 10 meters from the powerhouse plot.

	6. Hinnavaru: Close to the location are a beaching area for boats, water plant, health center and residential developments (Figure 6). All these areas are within 05 to 10 meters of the powerhouse plot. 7. Fuvahmulah: Close to the location are areas some industrial sites and residential areas (Figure 4). These sites are within 10 to 20 meters of powerhouse plot. 8. Funadhoo: Close to the location are residential area and youth centre (Figure 8). These areas are within 25 to 40 meters from the powerhouse plot. 9. Villingili: Close to the location are residential areas, sports grounds and youth centre (Figure 9). All these are within 30 to 40 meters from powerhouse plot. 10. Naifaru: Close to the location is a park (Figure 10). The park is around 20 meters from the powerhouse plot. 11. Fonadhoo: Close to the location are residential areas, driving school and water treatment plant (Figure 11). All these are within 20 to 40 meters from the powerhouse plot. 12. Maabaidhoo: Close to the location is only the stadium (Figure 12). The stadium is around 20 meters from the new powerhouse plot. 13. Kallaidhoo: There is no infrastructure nearby. The closest residential area is around 60 meters from the new powerhouse plot (Figure 13). 14. Kunahandhoo: Only farm areas are close to the proposed new powerhouse location (Figure 14). These farms are around 10 to 20 meters from the powerhouse plot. 15. Maavah: Close to the location are Mosque, Council, water treatment plant, fuel storage area, court and habour (Figure 15). These are within 30 to 60 meters from the powerhouse plot. 16. Maamendhoo: Close to the location are water treatment plant, fuel storage area and habour (Figure 16). All these are within 20 to 40 meters from the powerhouse plot. 17. Hithadhoo: Close to the location are habour, football ground and a mosque (Figure 17). All these are within 10 to 40 meters from the powerhouse plot. 18. Gan: Close to the location are boat building area and council building. These are within 30 to 40 meters from the powerhouse plot.

. Project Justification

Need for the project *(What problem is the project going to solve)*	The key benefits of the system can be summarized below: • BESS can act to provide the reserve energy requirement for the grid avoiding the need of keeping backup generators online to compensate for power fluctuations or contingencies. Normally the generators connected for spinning reserve is operated below their rated power (indicating low efficiencies) and is only increased when the need arises. As BESS takes the role of spinning reserve, low loaded generators can be avoided, and generators can be operated more efficiently with less running hours. With a use of a battery, the number of outage hours as well as outage times can be decreased which will increase the quality of the power supplied. • Renewable Following: Energy storage systems and tools to forecast the variability of solar power are the most viable solutions to maintain the

	stability of the power systems by facilitating effective load following. Deployment of sufficient storage capacity reduces the need for backup diesel generators, especially when cloudy weather conditions reduce the electricity output of PV panels. Charging when Solar PV are available and discharging when renewables sources are not available thus keeping the system stable. Hence this system goes well with the Solar PV to be installed through ASPIRE project (Note: Solar PV installation not part of the scope of work for this screening). • Energy Arbitrage: The energy storage system is charged using excess PV which will be used during minimize the operations of diesel generations. This application minimizes fuel consumption which have indirect financial and environmental benefits. • Black Start: In case of full blackout, the energy storage system can be used to supply the auxiliary power to fasten the power restoration procedure.
Purpose of the project (*what is going to be achieved by carrying out the project*)	As per the Strategic Action Plan (SAP) 2019 to 2023 (https://presidency.gov.mv/SAP/) of the government it is a target (Target 2.1) of the government is to achieve 20 percent increase of renewable energy in National Energy mix by 2023 when compared to 2018 levels. To attain this target ministry aims to achieve 70% of peak load of electricity from renewable energy sources from all inhabited islands. This project facilitates to achieve this objective as for large amount of PV installation becomes only feasible through sufficient Battery Energy Storage System as highlighted above.
Alternatives considered (*different ways to meet the project need and achieve the project purpose*)	There are some alternative energy storage technologies that can be used instead of Battery Energy Storage Systems. These are described below: **Flywheel Energy Storage System:** Flywheel energy storage systems (FESS) use electric energy input which is stored in the form of kinetic energy. The rotor spins in a nearly frictionless enclosure. When short- term backup power is required because utility power fluctuates or is lost, the inertia allows the rotor to continue spinning and the resulting kinetic energy is converted to electricity. Most modern high-speed flywheel energy storage systems consist of a massive rotating cylinder (a rim attached to a shaft) that is supported on a stator – the stationary part of an electric generator – by magnetically levitated bearings. To maintain efficiency, the flywheel system is operated in a vacuum to reduce drag. The flywheel is connected to a motor-generator that interacts with the utility grid through advanced power electronics. **Compressed Air Energy Storage:** Compressed Air Energy Storage (CAES) installations are used for storing electrical power, under the form of potential energy from compressed air. The heat generated during compression can be stored to improve the efficiency of compression-expansion cycle.

	In terms of use in renewable energy projects and requirements for space BESS seem to be more viable considering the current status of the technology.

. Project Description

Proposed start date	March 2022
Proposed completion date	June 2023
Estimated total cost	USD 17 to 19 million
Present land ownership	The site is presently owned by Fenaka Corporation as these are within the premise of existing powerhouse and new powerhouses that Fenaka is constructing. According to Fenaka the new powerhouses will be completed by the time installation of BESS commences through this project.
Description of the project (*with supporting material such as maps, drawings etc attached as required*)	This project involves installation of Battery Energy Storage System (BESS) in B.Eydhafushi, Gdh. Thinadhoo, HDh. Kulhudhuhfushi, S. Hithadhoo, S. Hulhudhoo-Meedhoo, Lh.Hinnavaru, Gn.Fuvahmulah, Sh.Funadhoo, Ga.Villingili, Lh.Naifaru, L.Fonadhoo, L.Maabaidhoo, L.Hithadhoo, L.Kallaidhoo, L.Gan, L.Maamendhoo, L.Kunahandhoo, L.Maavah. The location of BESS installation is within the powerhouse premise of each island as mentioned previous. The BESS will be housed in semicontainer of size 40 feet by 08 feet or 20 feet by 08 feet (see table below). The capacity of BESS required for each island and the corresponding estimate number of containers to be placed in each island is specified in the table below.

Island	Capacity (MWh)	Container Size	Number	Estimate Area Needed (sqft)
Eydhafushi	1	20’x8’	1	360
Thinadhoo	2.5	40’x8’	1	720
Kulhudhuhfushi	2	40’x8’	1	720
Addu (Mainland in Hithadhoo)	12	40’x8’	8	5440
Addu (Hulhudhoo Meedhoo)	2	40’x8’	1	720
Hinnavaru	1	20’x8’	1	360
Fuvahmulah	2	40’x8’	1	720
Fonadhoo	1	40’x8’	1	720
Gan	2	40’x8’	1	720
Kallaidhoo	1	40’x8’	1	720
Maabaidhoo	0.3	20’x8’	2	720
Maamendhoo	0.8	40’x8’	1	720
Kunahandhoo	0.5	20’x8’	2	720
Hithadhoo	0.5	20’x8’	2	720
Maavah	0.8	40’x8’	1	720
Funadhoo	0.8	40’ x 8’	1	720
Naifaru	1	40’x8’	1	720
Villingili	1.5	40’x8’	1	720

	If additional space is needed for supporting equipment based on availability of space within the powerhouse premise Fenaka can accommodate it. Bi-directional electrical and communication connection will be established between battery and grid and the PV system. The container system will house the battery racks, battery management system, air conditioning for temperature regulation and fire safety system. The fire safety system will include an automatic smoke detection system or radiant energy-sensing fire detection system with automatic fire suppression system appropriate for Lithium ion battery. An exhaust ventilation system will be included within the container designed to vacate the gas through the roof of the container in the event of fire The container will be place on a concrete slab. Prior to delivery of the container system the concrete slab will first be prepared. The following will be the basic method followed for construction of slab: 1. Clear and Level the required area 2. Add around ¾ inch gravel layer 3. Install achor barriers and rebar 4. Pour concrete, set wall or container anchors 5. Level the concrete The container will be delivered by a trailer truck and will be placed inside the power house or the alternative location using a long arm crane. When lifting the container the container will be secured and lifted as per the ISO1496 standard of lifting containers. A 4 legged sling with spreader will be used for this purpose. Following installation cabling and other required works will be completed. Any trenching required will follow the procedure identified under section 1.2.1.
Project Management Team	The project management team from the Ministry of Environment side includes the following members: Maumoon Khalid: Project Manager Thaalooth Rasheedh: Financial Management Specialist Mohamed Hamdhaan Zuhair: Environmental and Social Safeguards Specialist Abdulla Afsal: Procurement Management Specialist Ifaad Waheed: Communications Specialist Akram Waheed: Senior Energy Specialist Nuzhath Ahmed: Project Coordinator Aminath Hanaan Mohamed: Monitoring and Evaluation Specialist

B. Site Description Questionnaire

1. Site Setting and Land use/Ownership

a) Who is the owner/occupier of the site (refer to land registry/title deed)?

Fenaka Corporation Limited

b) What is the current land use of the site?

Powerhouse

c) When the site was first developed to the current land use?

When the powerhouse was first built in each island. The exact dates were not able to confirm.

d) What is the historical land use of the site prior to the current development of the site?

Virgin land prior to powerhouse construction.

e) What is the current land use of the properties surrounding the vicinity of the site and adjacent to the site? (Request for land use plan with planned developments at the island/note land use during site vicinity walk around);

Described in detail for each site under "Adjacent land features" above.

2. Consultations with island council/local communities and civil society organization

Several steps have been followed when undertaking consultations with the island communities and civil society for the purpose of the project. These include the following:

1. Online survey opened to the whole island community: These surveys were publicized through the social media pages and groups of the councils and the ministry. For none of the islands any concerns were raised regarding the Battery Energy Storage System. And for all the islands surveyed more than 90% of the survey respondents were happy with the project. These surveys were undertaken during July 2020. (note: the detailed reports were shared with World Bank through the screening that was undertaken for PV component in these islands)
2. Consultative sessions with the civil society of each island: Consultation with civil society of phase-1 islands (Addu, Fuvahmulah, Thinadhoo, Hinnavaru, Eydhafushi and Kulhudhuhfushi) was undertaken during the last week of December 2020. In these consultations, presentations were given from the PMU to the participants. Details of the project interventions planned for each island, results of the social survey and gender interventions planned under the project were shared with the participants. No particular concerns or issues regarding Battery Energy Storage System was raised by the participants of the consultation. (note: these consultation minutes were shared previously with the World Bank). For phase-2 islands consultations are planned for first quarter of 2022.

Additional information required from island council:

1) ***Current and projected population;***

Name of the Island	Male population	Female population	Total
1. Hinnavaru	1337	1345	2683
2. Addhu City			
2.1 Hithadhoo	7,564	5,521	13,085
2.2 Meedhoo	2,171	1,238	3,409
2.3 Hulhudhoo	898	608	1,505
3. Fuvahmulah City	5,199	4,674	9,873
4. Eydhafushi	1,548	1,346	2,894
5. Thinadhoo	3,821	2,401	6,222

6. Kulhudhuhfushi City	4,711	4,849	9,560
7. Laamu Atoll			
7.1 Isdhoo	615	493	1,108
7.2 Maavah	1,859	1,088	772
7.3 Maabaidhoo	432	332	764
7.4 Fonadhoo	1,701	1,238	2,939
7.6 Hithadhoo	570	529	1,099
7.7 Kunahandhoo	390	338	728
7.8 Kallaidhoo	363	299	662
7.9 Gan	3,786	2,240	1,546
7.10 Maamendhoo	1,080	627	453
7.11 Dhanbidhoo	395	336	737
8. Funadhoo	1,195	1,214	2,409
9. Naifaru	4,740	2,572	2,167
10. Villingili	3,425	2,188	1,238

2) ***Number of households (and Empty houses);***

Name of the Island	**No. Households**	**No. empty houses/plots**
1. Hinnavaru	875	32
2. Addhu City		
2.1 Hithadhoo	1980	Not available
2.2 Meedhoo	397	Not Available
2.3 Hulhudhoo	306	Not Available
3. Fuvahmulah City	2613	703
4. Eydhafushi	554	94
5. Thinadhoo	1343	467
6. Kulhudhuhfushi City	1385	Not available
7. Laamu Atoll		
7.1 Isdhoo	177	Not available
7.2 Maavah	312	Not available
7.3 Maabaidhoo	137	Not available
7.4 Fonadhoo	394	Not available
7.6 Hithadhoo	196	Not available
7.7 Kunahandhoo	114	Not available
7.8 Kallaidhoo	137	Not available
7.9 Gan	538	Not available
7.10 Maamendhoo	188	Not available
7.11 Dhanbidhoo	135	Not available
8. Funadhoo	401	Not available
9. Villingili	502	Not available
10. Naifaru	787	Not available

3) ***Planned development activities;***

Addu City: Feydhoo (Isles - Feydhoo), Hithadhoo (Isles - Hithadhoo), Hulhudhoo (Isles - Hulhudhoo), Maradhoo (Isles - Maradhoo), MaradhooFeydhoo (Isles - Maradhoofeydhoo), Meedhoo (Isles - Meedhoo).

Fuvahmulah City: Isles - Fuvahmulah

Gdh. Thinadhoo: Isles - Thinadhoo

Lh. Hinnavaru: Isles - Hinnavaru

Lh. Naifaru: Isles - Naifaru

B. Eydhafushi: Isles - Eydhafushi

Sh. Funadhoo: Isles - Funadhoo

L.Fonadhoo: Isles - Fonadhoo

L.Gan: Isles - Gan

L. Isdhoo: Isles - Isdhoo

L.Kallaidhoo: Isles - Kalaidhoo

L.Dhanbidhoo: Isles - Dhan'bidhoo

L.Maabaidhoo: Isles - Maabaidhoo

L.Hithadhoo: Isles - Hithadhoo

L.Kunahandhoo: Isles - Kunahandhoo

L.Maavah: Isles - Maavah

L.Maamendhoo: Isles - Maamendhoo

Ga. Villingili: Isles - Vilin'gili

4) ***Present employment by industry;*** *Information on employment based on industry is available at the atoll level the data at the atoll level, as per household income and expenditure survey are presented below:*

Atoll	Agriculture (%)	Other Industry (%)	Service (%)
Lhaviyani Atoll	18	22	59
Baa Atoll	10	28	67
Addu City	5	20	74
Fuvahmulah City	9	21	68
Haa Dhaal Atoll	10	28	61
Gaafu Dhaal Atoll	18	17	62
Laamu Atoll	22	19	55
Shaviyani Atoll	15	36	47
Gaafu Alif Atoll	27	18	54

5) ***Income distribution;***

Income distribution information is also available at an atoll level. The information for income distribution and labour force participation based on household income and expenditure survey of 2016 are presented below:

Atoll	Labor force participation rate (%)	Average hourly income of women (MVR)	Average hourly income of men (MVR)
Lhaviyani Atoll	51.5	58.32	52.7
Baa Atoll	52.5	68.43	56.95
Addu City	46.1	54.09	60.78
Fuvahmulah City	48.7	57.17	55.99
Haa Dhaal Atoll	56.1	74.89	99.26
Gaafu Dhaal Atoll	48.7	44.27	57.92
Laamu Atoll	56.5	64.25	74.73
Shaviyani Atoll	61.2	58.45	56.06
Gaafu Alif Atoll	50.4	52.05	65.15

6) ***Public health status.***

In terms of public health, except for some smaller islands selected from laamu atoll, all other islands selected for the project are major population centres in each of these atolls. Hence, they have relatively good public health facilities. In this regard, hospitals are found in Addu City, Fuvahmulah City, Kulhudhuhfushi City, Eydhafushi, Thinadhoo, Funadhoo and L.Gan. Hinnavaru has a health centre, which is in the process of being upgraded to a 30 bed hospital. Moreover, there are plans to build a first of its kind super specialist Cancer hospital in Laamu Atoll Gan. As for rest of the islands in Laamu atoll there are health centres in these islands.

C. Screening for Potential Environmental Impacts in relation to the proposed project intervention

	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
Section A: General					
1	Will construction and operation of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc)	**Yes**		**Low**	As the BESS are located within the premise of the Powerhouse no physical changes are expected within the locality as even currently the powerhouse locations house power generation infrastructure. This includes the main powerhouse building with diesel generators, fuel storage area and administrative building in each island.
2	Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?	**Yes**		**Moderate**	There are some risks that may arise from BESS systems if appropriate standards are not followed. Risks may occur during transportation and handling. Some of these risks can be summarized as below: • Risk of physical damage to staff involved during transportation during transportation, loading, unloading and installation. • Mechanical damage to BESS during transport and handling including crush and puncture. This can lead to the following: (a) If battery casing is damaged it can lead to leakages. If a battery casing is ruptured, the fluid or gel (electrolyte) inside can leak, resulting in toxic fumes, burns, corrosion or explosions. (b) Mechanical damage can also lead to electrical surges leading to short circuit and battery heating during operation, which in turn can lead to potential battery explosion and fires.

					- Salt damage during transport if not appropriately sealed can lead to fire hazard during operational phase.
3	Will the Project produce solid wastes during construction or operation?	**Yes**		**Moderate**	During construction and installation phase not much waste is expected to be produced considering the scale of this project. However at the end of life the Battery waste produced will be considered as significant hazardous waste. Considering that Maldives does not have any facilities to appropriately dispose or manage such waste this becomes a major aspect that needs to be addressed by the project. In terms of recycling literature suggests that large scale recycling technologies for Lithium ion batteries are not yet fully established.
4	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	**Yes**		**Moderate**	In terms of emissions two types of emissions can occur from BESS. Based on literature this can be categorized into two subcategories. (a) Hazardous Emissions during malfunction: Hazardous emissions usually occur from overheating and overcharging. Based on battery composition overheating and fire can lead to emission of gases such as hydrogen fluoride, phosphoryl fluoride, carbon monoxide and carbon dioxide. (b) Greenhouse Gas Emissions: Based on lifecycle approach and battery chemistry, a median of between 0.49- 0.60 kgCO_2 eq.per Kwh is produced from BESS. In addition to these emissions there are indirect emissions that can occur. This includes transport emissions. Moreover as the BESS container will be placed on concrete foundation, dust will become an issue during concrete mixing.

5	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	**Yes**		**Low**	During construction phase some noise can occur, however considering the scope of works significant prolonged noise is not anticipated. During operation phase the BESS system components will generate noise emissions at times of charging and discharging. Moreover, noise will arise from air-condition units used for BESS containers and from the vents. However significant noise is unlikely to occur during operations. Moreover, considering the BESS is proposed to be installed within the Powerhouse premise, which in all the islands are located in industrial and service zones, any impacts on residential households are negligible.
6	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater or coastal waters?	**Yes**		**Low**	As indicated previously leaks may occur during transport due to mechanical damage. In addition, during operation due to overheating etc, leaks can occur. However, as the BESS are located within container systems which are placed on concrete pads, the chances of any direct impacts on ground or water bodies are minimal.
7	Will the project cause localized flooding and poor drainage during construction? Is the project area located in a flooding location?	**Yes**		**Low**	Considering footprint unlikely to occur, as in most islands very small space is used for the purpose of BESS installation and it is within the existing powerhouse boundary walls. However, recently surge related flooding have increased in the Maldives which is likely due to a combined effect of increase in frequency of extreme events due to climate change and changes brought about to the natural defense of islands through human interventions. Hence designing the BESS taking into account future flooding will be beneficial.
8	Will there be any risks and vulnerabilities to public safety due to physical hazards during construction or operation of the Project?	**Yes**		**Low**	Public safety will be compromised in case of hazardous events like fires. The risk is rated low considering that the powerhouse of most islands are located away from the public areas. Rather than direct fire impact, the primary concern will be loss of all power infrastructure in case of fire in BESS. Hence control

					mechanisms need to be in place to reduce fire impacts and also to minimize spread of fire.
9	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	**Yes**		**Low**	During construction phase will involve loading and unloading activities of these containers, hence minor temporary disruptions may occur during transportation of containers. Hence impact is rated as low. In terms of sea transport of containers to the island, as all these islands are major population centers, these islands have well developed harbor infrastructure, hence dredging or any such activity for unloading purpose is not anticipated at this moment and time. Within powerhouse footprint, hence no transport related impacts during operation phase.
10	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?		**No**	**N/A**	As BESS is located within Powerhouse premise this is not applicable to this project.
11	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project?		**No**	**N/A**	As BESS is located within Powerhouse premise this is not applicable to this project.
12	Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, mountains, forests which could be affected by the project?		**No**	**N/A**	Construction activities planned to be undertaken in reclaimed land.
13	Is the location within or adjacent to the coastal zone?		**No**	**N/A**	All locations are outside the area of 20 meters from shoreline.

	If so, what is the distance to the coast?				Note the 20 meter area from shoreline is considered as environmental protection coastal zone as per land use allocation in Maldives.
14	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, migration, which could be affected by the project?		**No**	**N/A**	As BESS is located within Powerhouse premise this is not applicable to this project.
15	Are there mangrove, coral reef, sea grass bed, turtle beach habitats etc within close proximity?		**No**	**N/A**	As BESS is located within Powerhouse premise this is not applicable to this project.
16	Is the project located in a previously undeveloped area where there will be loss of green-field land		**No**	**N/A**	As BESS is located within Powerhouse premise this is not applicable to this project.
17	Will the project cause the removal of trees in the locality?	**Yes**		**Low**	Depending on the sites selected for the project vegetation clearance if any is expected to occur only in the following islands: 1. HulhudhooMeedhoo: Some shrubs and some branches may need to be cleared in this location (Figure 19). 2. Kulhudhuhfushi: There is one small coconut palm, which may need to be relocated (however, very unlikely) (Figure 20). 3. Fuvahmulah: Mature trees will need to be removed from this location. However the trees will be removed prior to BESS construction as the site will be cleared for Powerhouse Construction by Fenaka prior to that (Figure 21). 4. Funadhoo: There is one tree that needs to be removed or relocated. 5. Fonadhoo: Some shrubs may have to be removed. 6. Kallaidhoo: Mature tress will need to be removed from this location. However, the trees will be removed prior to BESS as the site will be

					cleared for Powerhouse Construction by Fenaka . 7. Kunahandhoo: Mature trees will need to be removed from this location. However, the trees will be removed prior to BESS construction as the site will be cleared for Powerhouse construction by Fenaka. 8. Maabaidhoo: Mature trees will need to be removed from this location. However, the trees will be removed prior to BESS construction as the site will be cleared for Powerhouse construction by Fenaka.  FIGURE 19 HULHUDHOOMEEDHOO BESS DESIGNATED LOCATION  FIGURE 20 KULHUDHUHFUSHI BESS DESIGNATED LOCATION  FIGURE 21 FUVAHMULAH POWERHOUSE LOCATION
18	Can any of the identified historic or culturally importance sites on or around the location be affected by the project?		**No**	**N/A**	As within powerhouse premise no such areas.

19	Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	**Yes**		**Low**	On the location no such areas as BESS is placed within powerhouse premise. There are some temporary material placed on the site, especially in HulhudhooMeedhoo and Kulhudhuhfushi. According to Powerhouse staff However, around the area the following landuses can be identified for each island: 1. Eydhafushi: Close to the Powerhouse there is the Dhiraagu plot, sports pitches, residential areas and sewerage system related infrastructure. All these areas are within 05 to 10 meters of the powerhouse plot. 2. Kulhudhuhfushi: Close to the Powerhouse there is the waste management location, sports pitches and public works construction site. These sites are within 05 to 10 meters of the powerhouse plot. 3. Thinadhoo: Close to the site are the desalination plant, small wetland area and residential buildings. All these sites are within 05 to 10 meters of the powerhouse plot. 4. Addu (Mainland): Close to this location is Addu Port Area. There is no residential settlements nearby this site. 5. Addu (Hulhudhoo-Meedhoo): Close to the location are residential developments, Playground of the school, Water storage tank and Public Works work site. All these areas are within 05 to 10 meters from the powerhouse plot. 6. Hinnavaru: Close to the location are a beaching area for boats, water plant, health center and residential developments. All these areas are within 05 to 10 meters of the powerhouse plot. 7. Fuvahmulah: Close to the location are areas some industrial sites and residential areas. These sites are within 10 to 20 meters of powerhouse plot.

					8. Funadhoo: Close to the location are residential area and youth centre. These areas are within 25 to 40 meters from the powerhouse plot. 9. Villingili: Close to the location are residential areas, sports grounds and youth centre. All these are within 30 to 40 meters from powerhouse plot. 10. Naifaru: Close to the location is a park. The park is around 20 meters from the powerhouse plot. 11. Fonadhoo: Close to the location are residential areas, driving school and water treatment plant. All these are within 20 to 40 meters from the powerhouse plot. 12. Maabaidhoo: Close to the location is only the stadium. The stadium is around 20 meters from the new powerhouse plot. 13. Kallaidhoo: There is no infrastructure nearby. The closest residential area is around 60 meters from the new powerhouse plot. 14. Kunahandhoo: Only farm areas are close to the proposed new powerhouse location. These farms are around 10 to 20 meters from the powerhouse plot. 15. Maavah: Close to the location are Mosque, Council, water treatment plant, fuel storage area, court and habour. These are within 30 to 60 meters from the powerhouse plot. 16. Maamendhoo: Close to the location are water treatment plant, fuel storage area and habour. All these are within 20 to 40 meters from the powerhouse plot. 17. Hithadhoo: Close to the location are habour, football ground and a mosque. All these are within 10 to 40 meters from the powerhouse plot. 18. Gan: Close to the location are boat building area and council building. These are within 30 to 40 meters from the powerhouse plot.

					None of these areas are to be directly impacted as BESS will be located within Powerhouse premise. Only impact that may occur will happen in case of fire or damage to BESS.
20	Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?		**No**	**N/A**	As powerhouse in the islands are located away from population centers, this is not applicable.
21	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project	**Yes**		**Low**	Playground of the school is close to powerhouse in Hulhudhoomeedhoo. For Naifaru there is a kids park closeby and Hithadhoo there is a mosque. Other than this no other sites are close to such sensitive locations. Even in these islands as BESS will be located within the walled periphery of Powerhouse, hence no impacts are anticipated.
22	Are there any Defence Installations / Airport Routes		**No**	**N/A**	No such installations nearby.
23	Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?		**No**	**N/A**	As within powerhouse premise no such areas.
24	Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?		**No**	**N/A**	No such areas have been identified as such at this stage. (Note due to Covid travel restrictions site conditions were assessed remotely using Fenaka powerhouse staff and drone imagery).
25	Will the project involve treatment of Solid Waste, if so indicate the amounts, nature of waste and briefly describe proposed waste		**No**	**N/A**	Does not involve treatment of Solid waste, construction waste will be required to be transferred to the regional waste management facility at Thilafushi, any domestic general waste generated by the construction work force will be

	management technologies to be implemented on site.				managed through the island waste stream to be managed at the Island Waste Management Center (IWMC) and their on forth the Regional Waste Management Facility closest to the island.
Section B: Specific Screening Questions on Floating Solar					
3	Water body identified for floating solar is lagoon, coastal water way, harbor/jetty area or other, please provide details in the comments of the site			**N/A**	
4	Is the identified water body is used for water supply?			**N/A**	
5	Is the identified water body used for fishing activities?			**N/A**	
6	Is the identified water body used for any other human activity, such as recreation, docking of boats etc?			**N/A**	
7	Will the project activity restrict access to the water body or lead to safety concerns?			**N/A**	
8	Will the establishment of the Solar PV lead to aesthetic issues on site.			**N/A**	
Section C: Social Impact Screening					
1	Will the project create significant/ limited/ no social impacts? If so please provide details of what they will be.	**Yes**		**High (positive)**	The project will lead to significant positive impacts socially as under Gender Action Plan of the project, it involves training of atleast18 individuals for operation of Battery Energy Storage Systems, out of which 12 are required to be women. This will lead to job creation in these islands and increase in number of trained women in energy sector technical positions in Maldives. Which was identified as a gap. A 100 percent increase compared to baseline are expected by the end of project.
2	Land acquisition resulting in loss of income from agricultural land, plantation or other existing land-use.		**No**	**N/A**	No land acquisition required as the area is inside the powerhouse premise, which is owned by project partner Fenaka.
3	Land acquisition resulting in relocation of households.		**No**	**N/A**	see above

4	Cause any reduction of access to traditional and river dependent communities (to river and areas where they earn for their primary or substantial livelihood).		**No**	**N/A**	
5	Cause any displacement or adverse impact on tribal settlement(s).		**No**	**N/A**	See question 2
6	Lead to any specific gender issues.	**Yes**		**High (positive)**	As mentioned in question 1 the project once completed will lead to 100 percent increase in number of women employed in technical positions of utilities in Malidves.
7	Will the project create significant / limited / no Social impacts during the construction stage?	**Yes**		**Low**	Not much activities are involved during construction of this project, hence only minimal impacts are likely if any to occur. Not much physical work is involved as BESS is already factory assembled.
Section D: Impacts of Construction					
1	Will the project lead to flooding of adjacent areas		**No**	**N/A**	
2	Will it involve the improper storage and handling of substances leading to contamination of soil and water	**Yes**		**Low**	Further details have been provided in section A question 6.
3	Will the activity lead to elevated noise and dust emission?	**Yes**		**Low**	Only noise that will be generated during construction phase will be from concrete mixers during works for the concrete slab.
4	Will project activities lead to disruption to traffic movements	**Yes**		**Low**	Some disruptions may occur during loading unloading and transport but will be only temporary and for a short period hence the impact is considered low.

5	Will project activities lead to damage to existing infrastructure, public utilities, amenities etc.		**No**	**N/A**	No damage is anticipated based on scope of works.
6	Possible conflicts with and/or disruption to local community	**Yes**		**Low**	No particular issues can be identified for construction phase. However the following general aspects, applicable to all construction activities apply here as well: • Conflicts may occur if any human health impacts occur to the public due to negligence of construction work force. • Moreover, especially if foreign work force is involved conflicts may occur with local community. • The Labour Management Procedures developed for the project needs to be followed to address these issues (link: https://www.environment.gov.mv/v2/en/download/10026).
7	Are there adequate facilities for storage of construction goods & materials	**Yes**		**Low**	Not much Storage will be needed for this project considering scope. The container BESS will be taken straight from the port to the islands and from there to the site. Preparatory works including concrete slab will be completed before hand.
8	Will need to establish facilities for storage of any hazardous material		**No**	**N/A**	Hazardous waste is not expected to be generated during construction phase as it involved only minimal works.
9	Facilities for long term housing for operational workers		**No**	**N/A**	Long term housing will not be needed. Only short term stay needed considering scope of works, for which rented accommodation could be used.
10	Will the construction works (Permanent &Temporary) lead to alterations of the site		**No**	**N/A**	The sites already have power infrastructure, BESS will be addition to existing infrastructure in each island, hence no change in landuse.
11	Are facilities for construction workers (temporary labour camp, drinking water, waste	**Yes**		**Low**	Considering scale of the construction works this will only be minor. However the following issues can be identified for any labour accommodation area:

	disposal, etc.) required during implementation				- Lack of sanitation and clean drinking water at the project site. - Over congestion of work force in a small space can lead to disease and other such outbreaks. Often foreign labour in Maldives are housed by contractors in unhygienic and inhumane conditions. - Lack of access to shower facilities. - Food being served in unhygienic conditions. - Lack of availability of adequate meals. - Lack of clearly demarked designated areas for waste disposal can lead to unhygienic living/working environment which can lead to disease etc. - Areas in living and working quarters where water can collect can lead to mosquito breeding which in turn can lead to outbreak of mosquito borne diseases within the work force. - Pest infestation in the work space and living quarters can lead to unhygienic working/living conditions and can lead to serious disease outbreaks. - If foreign labour is involved social conflicts with the community due to differences in culture. - If project undertaken during Covid 19 situation. Chance of transmission of Covid from the workforce to the community.
12	Are facilities for disposal of solid waste available on the Island- please specify the forms in the comments	**Yes**		**Low**	Each of these islands have Island Waste Management Centers (IWMCs) all domestic waste produced by any staff of the contractor during construction phase will go there and from there onwards to regional facility. All construction waste generated needs to be taken to Thilafushi island by contractor.
Section E: Cumulative Impacts					

1	Cumulative effects due to proximity to other existing or planned projects with similar impacts	**Yes**		**Moderate**	Some activities are expected to be undertaken in parallel. In this regard, powerhouse construction in Fuvahmulah, Kallaidhoo, Kunahandhoo, Maabaidhoo are likely to coincide with the project timeframe.

8. Project operating requirements

		Yes	No
24	Does the project belong to a prescribed category of the Environmental Protection Authority for EIA		No. Screening undertaken. EPA decision is to proceed with the project without any assessment
25	Does the project need to obtain clearances from agencies such as the EPA, Island Council, Atoll Council etc :		No further approval needed as project undertaken within powerhouse premise. The area was identified by Fenaka which is an implementation partner of the project the area is owned by Fenaka as well.

9. Conclusion and Screening Decision

Summary of environmental effects:

Assuming that all mitigation measures are implemented as proposed, the following effects cane be predicted

	N/S - Effect not significant, or can be rendered insignificant with mitigation
✓	SP - Significant positive effect
	SN - Significant negative effect
	U - Outcome unknown or cannot be predicted, even with mitigation

10. Screening Decision Recommendation (check one):

✓	All potentially adverse effects can be classified as general construction related impacts and are mitigatable with known technology and operational impacts are minimal. Public concern does not warrant further assessment. As most of the impacts are related to safety aspects and these can be ensured through various of safety code and since the Maldives EPA screening suggested that no further assessments needed. An Environmental and Social Code of Practice needs to be developed and the project undertaken as per the code.
	All potentially adverse effects can be classified as general construction related impacts and are mitigatable with known technology and operational impacts are minimal. Public concern does not warrant further assessment. Therefore, standalone Environmental and Social Assessment not required, an Environmental and Social Management Plan would be required prior to the project proceeding. An indicative mitigation plan to the identified risks are provided in Annex 9
	Potential adverse impacts are significant, hence, a standalone Environmental and Social Impact Assessment, including an Environmental and Social Management Plan is needed before the project can proceed
	Potential adverse impacts are significant, hence project cannot be justified

11. Details of Persons Responsible for the Environmental Screening

Screening report completed by:

Name and Designation: Mohamed Hamdhaan Zuhair (Environmental and Social Safeguards Specialist, Ministry of Environment)

Date: 09th December 2021

Signature:

Screening report reviewed by:

Name and Designation: Maumoon Khalid, Project Manager

Date: 09th December 2021

Signature

Approved by:

Name and Designation:

Date:

Signature:

Annex 1: Location Maps

(a) Kulhudhuhfushi City

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

(b) Hithadhoo (Addu City)

(c) HulhudhooMeedhoo (Addu City)

(d) Fuvahmulah

(e) Thinadhoo


N
E
S
W
Residential Area
Mosque
Public Works
New Powerhouse
1600 sqft
Small Wetland Area
Old Powerhouse
Fuel Storage Tanks
Water Plant
Legend
BESS
0
25
50
100
150
200
Meters
CNES
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

(f) Eydhafushi

(g) Hinnavaru

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

(h) Funadhoo


N
E
S
W
Funadhoo Youth Centre
Residential Blocks
40ft x 08ft BESS
0
10
20
40
60
80
Meters
Legend
Trees & Palms
BESS

(i) Villingili

(j) Naifaru

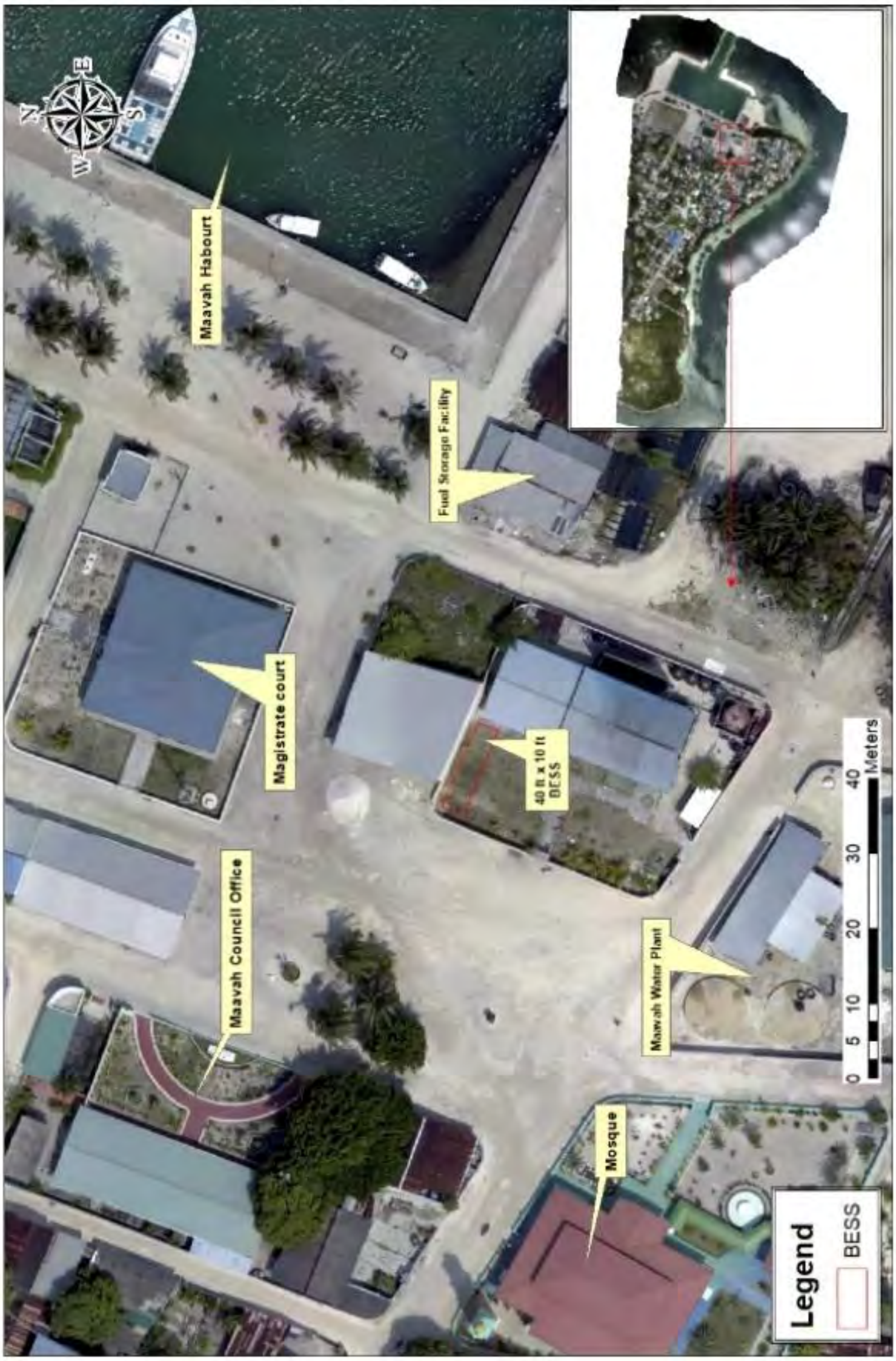
(k) Fonadhoo


N
E
S
W
Driving School
Residential Areas
40ft x 08ft BESS
Desalination Plant
Stadium
Meters
0
15
30
60
90
120
Legend
BESS

(l) Maabaidhoo

(m) Kallaidhoo

(n) Maavah


N
E
S
W
Maavah Habourt
Fuel Storage Facility
Magistrate court
40 ft x 10 ft
BESS
Maavah Council Office
Maavah Water Plant
Mosque
0 5 10 20 30 40
Meters
Legend
BESS

(o) Maamendhoo

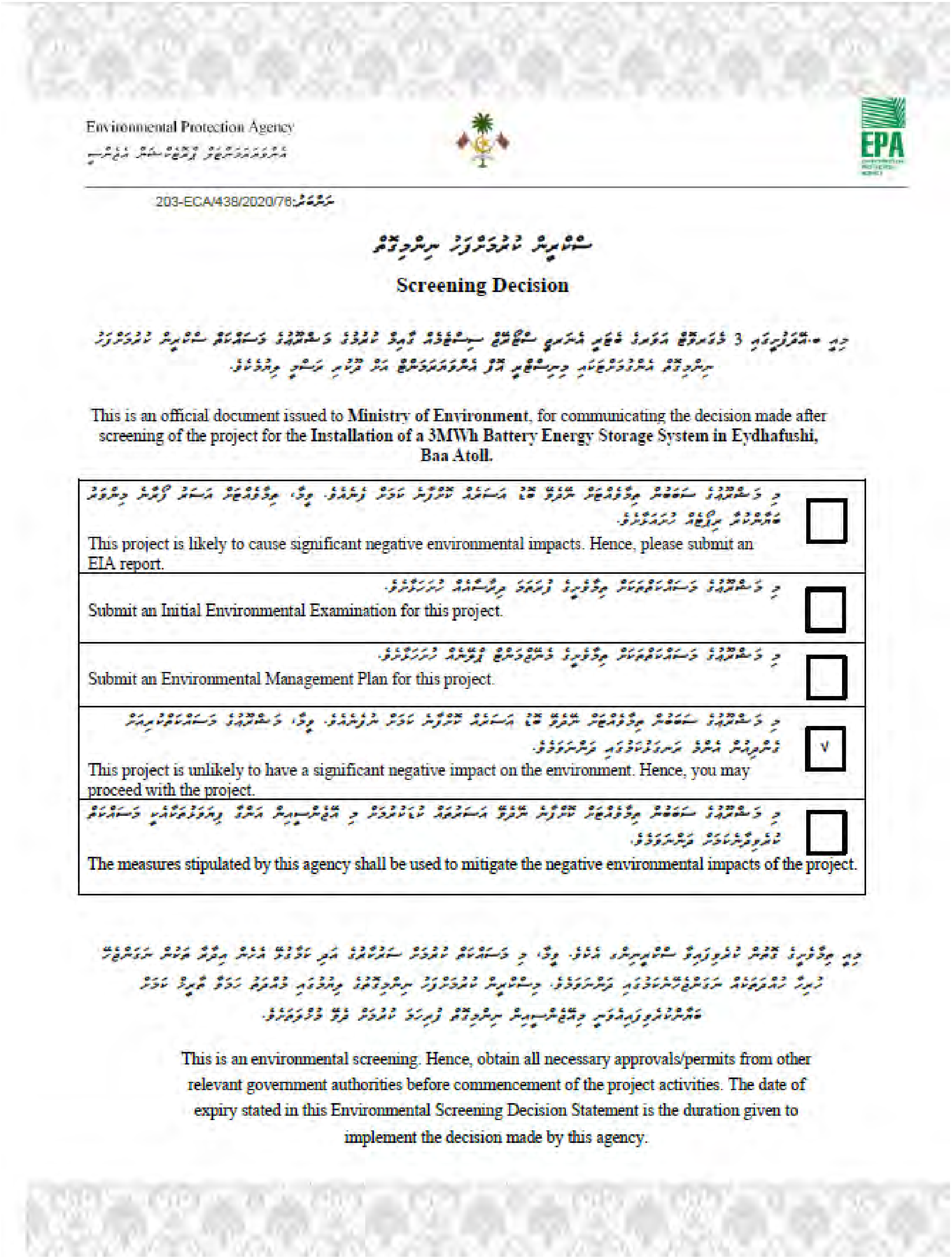
(p) Hithadhoo


N
E
S
W
Habour
Football Ground
40ft x 08ft BESS
Mosque
0 5 10 20 30 40 Meters
Legend
BESS

(q) Gan


N
E
S
W
Gan Secretariate
40ft x 08ft BESS
Boat building area
Legend
BESS
0 10 20 40 60 80
Meters

Annex 2: EPA Screening Decision



Environmental Protection Agency

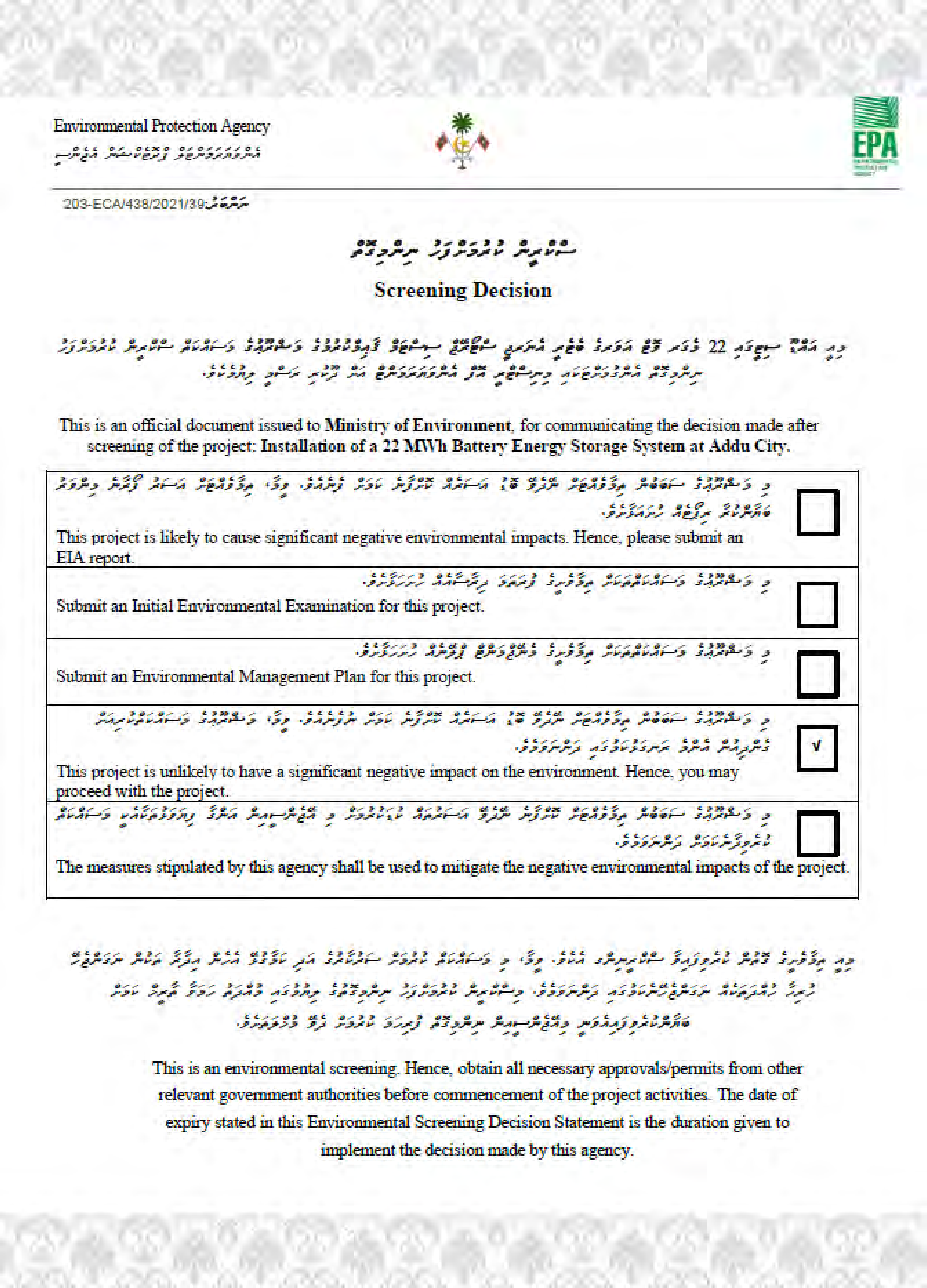
203-ECA/438/2020/76

Screening Decision

This is an official document issued to **Ministry of Environment**, for communicating the decision made after screening of the project for the **Installation of a 3MWh Battery Energy Storage System in Eydhafushi, Baa Atoll.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency
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Screening Decision

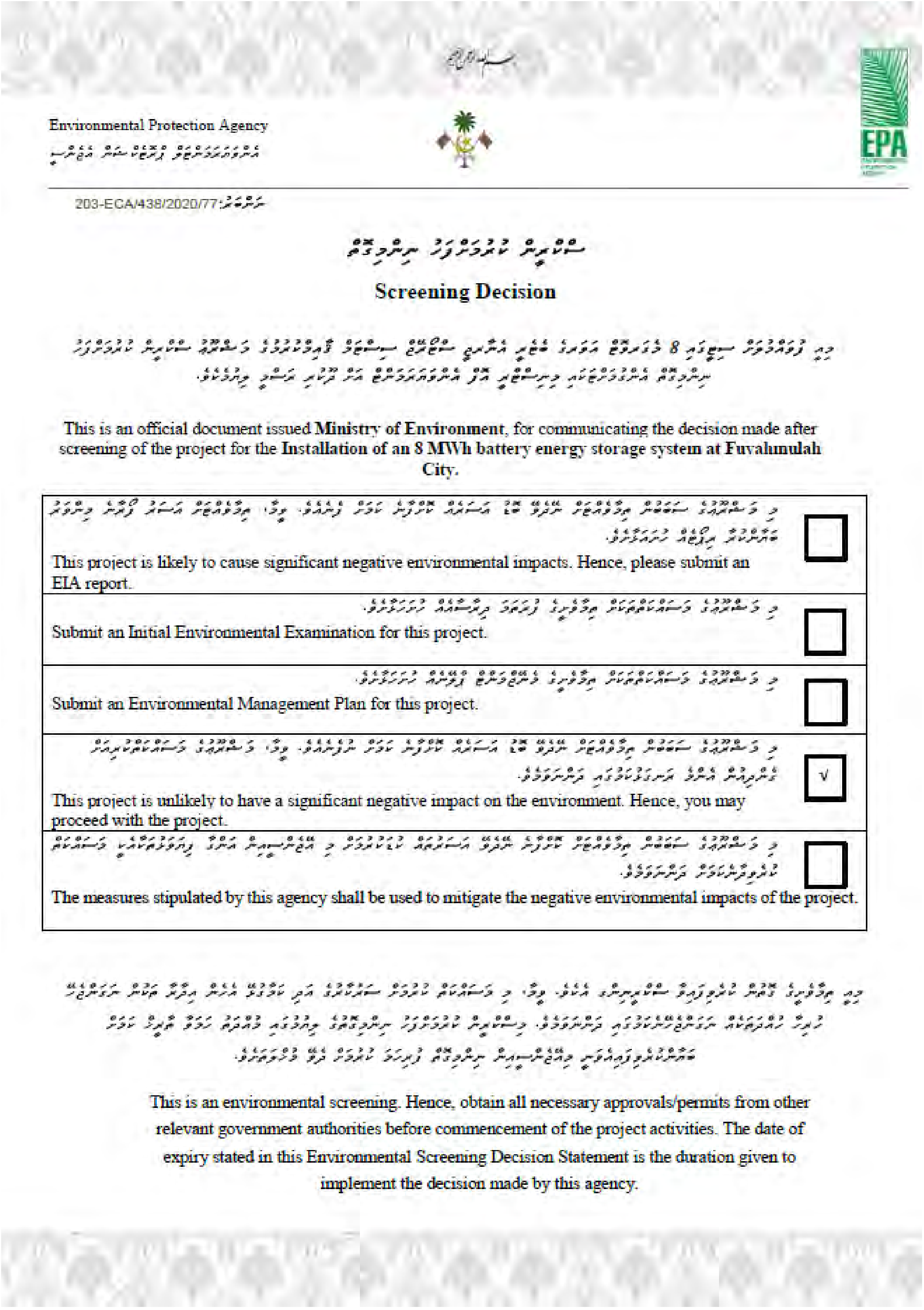
މިއީ އައްޑޫ ސިޓީގައި 22 މެގަވަޓް އަވަރގެ ބެޓެރީ އެނަރޖީ ސްޓޯރޭޖް ސިސްޓަމް ޤާއިމްކުރުމުގެ މަޝްރޫޢުގެ ވަށައިގެން ސްކްރީން ކުރުމުގެ ނިންމުން އެންވަޔަރަންމަންޓް މިނިސްޓްރީއަށް އެންގުމަށްޓަކައި ދޫކުރެވޭ ރަސްމީ ލިޔުމެކެވެ.

This is an official document issued to **Ministry of Environment**, for communicating the decision made after screening of the project: **Installation of a 22 MWh Battery Energy Storage System at Addu City.**

މި މަޝްރޫޢުގެ ސަބަބުން ތިމާވެއްޓަށް ނުރައްކާ ބޮޑު އަސަރެއް ކޮށްފާނެ ކަމަށް ފެންނުތީ. ވީމާ، ތިމާވެއްޓަށް އަސަރު ކުރާނެ މިންވަރު ބަލައިދޭ ރިޕޯޓެއް ހުށަހަޅާށެވެ. This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
މި މަޝްރޫޢުގެ ވަށައިގެންވާ ތިމާވެށީގެ ފުރަތަމަ ދިރާސާއެއް ހުށަހަޅާށެވެ. Submit an Initial Environmental Examination for this project.	☐
މި މަޝްރޫޢުގެ ވަށައިގެންވާ ތިމާވެށީގެ މެނޭޖްމަންޓް ޕްލޭނެއް ހުށަހަޅާށެވެ. Submit an Environmental Management Plan for this project.	☐
މި މަޝްރޫޢުގެ ސަބަބުން ތިމާވެއްޓަށް ނުރައްކާ ބޮޑު އަސަރެއް ކޮށްނުފާނެ ކަމަށް ދެކެވެއެވެ. ވީމާ، މަޝްރޫޢުގެ މަސައްކަތްތައް ކުރިއަށް ގެންދިއުމަށް ހުއްދަ ދެވިފައިވާކަމުގައި ދަންނަވަމެވެ. This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
މި މަޝްރޫޢުގެ ސަބަބުން ތިމާވެއްޓަށް ކުރާނެ ނޭދެވޭ އަސަރުތައް ކުޑަކުރުމަށް މި އޭޖެންސީން އަންގާ ފިޔަވަޅުތަކެއް އަޅައިގެން މަޝްރޫޢު ކުރިއަށްގެންދަވަން ދަންނަވަމެވެ. The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

މިއީ ތިމާވެށީގެ ގޮތުން ކުރެވުނު ސްކްރީނިންގއެކެވެ. ވީމާ، މި މަޝްރޫޢުގެ މަސައްކަތް ފެށުމުގެ ކުރިން ސަރުކާރުގެ އެހެން އިދާރާތަކުން ބޭނުންވާ ހުއްދަތައް
ހޯދަންވާނެއެވެ. މި ތިމާވެށީގެ ސްކްރީން ކުރުމުގެ ނިންމުމުގެ ލިޔުމުގައި ބަޔާންކޮށްފައިވާ މުއްދަތަކީ
ތަންފީޒުކުރުމަށްޓަކައި މި އޭޖެންސީން ނިންމާފައިވާ ނިންމުމަށް ދެވޭ މުއްދަތެވެ.

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

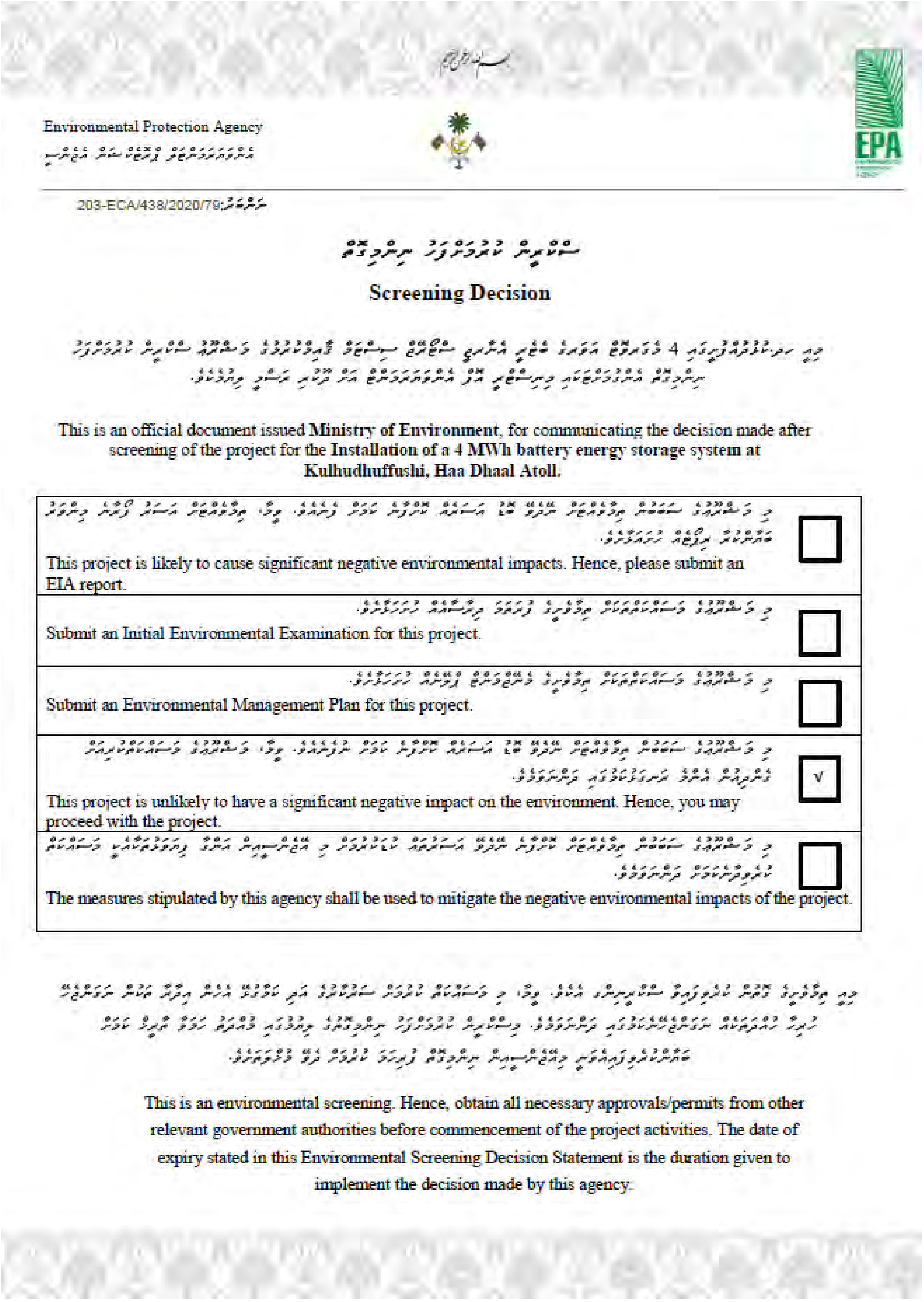
203-ECA/438/2020/77

Screening Decision

This is an official document issued **Ministry of Environment**, for communicating the decision made after screening of the project for the **Installation of an 8 MWh battery energy storage system at Fuvahmulah City.**

☐	This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.
☐	Submit an Initial Environmental Examination for this project.
☐	Submit an Environmental Management Plan for this project.
☑	This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.
☐	The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

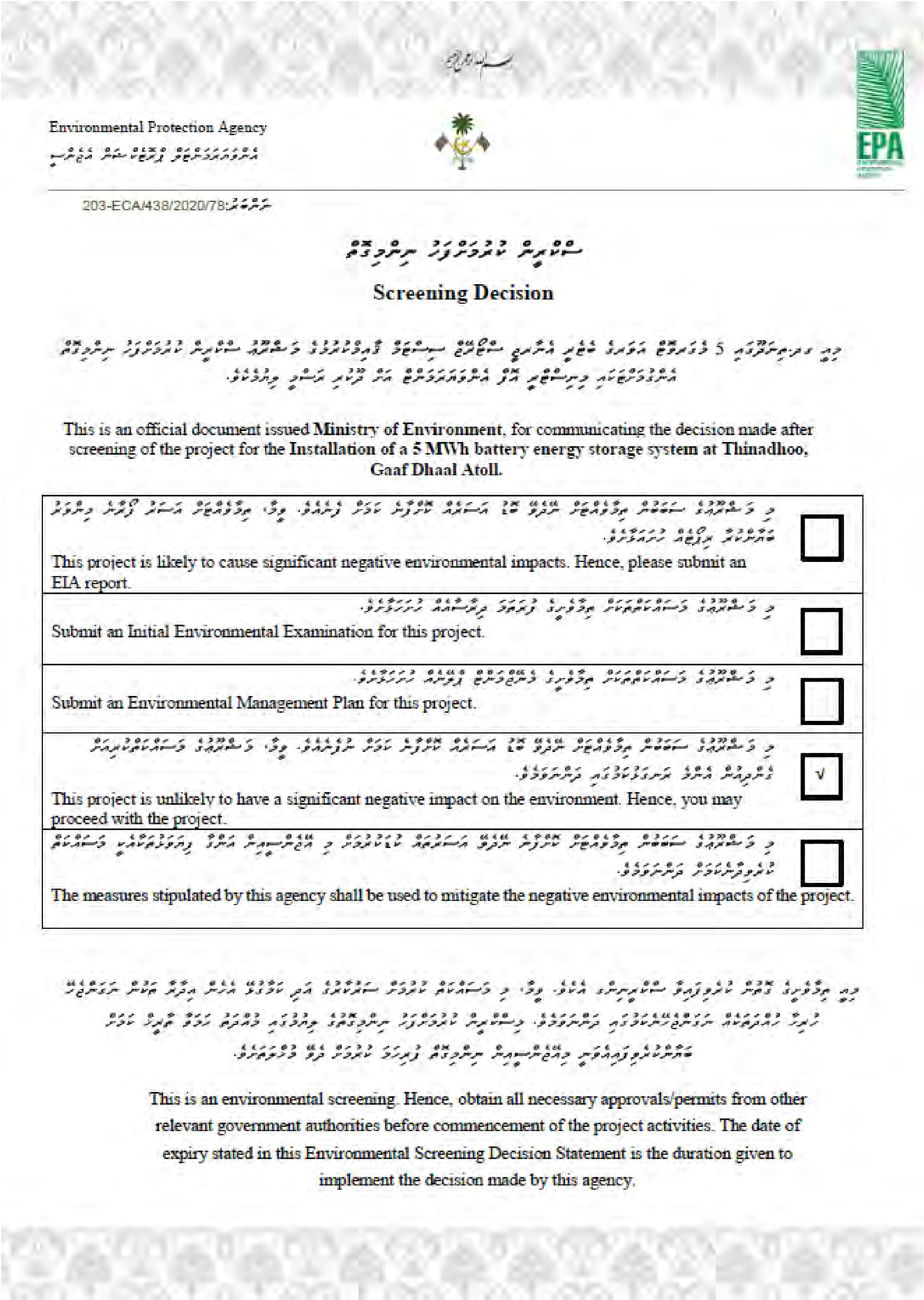
203-ECA/438/2020/79:ނަންބަރު

Screening Decision

This is an official document issued **Ministry of Environment**, for communicating the decision made after screening of the project for the **Installation of a 4 MWh battery energy storage system at Kulhudhuffushi, Haa Dhaal Atoll.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency
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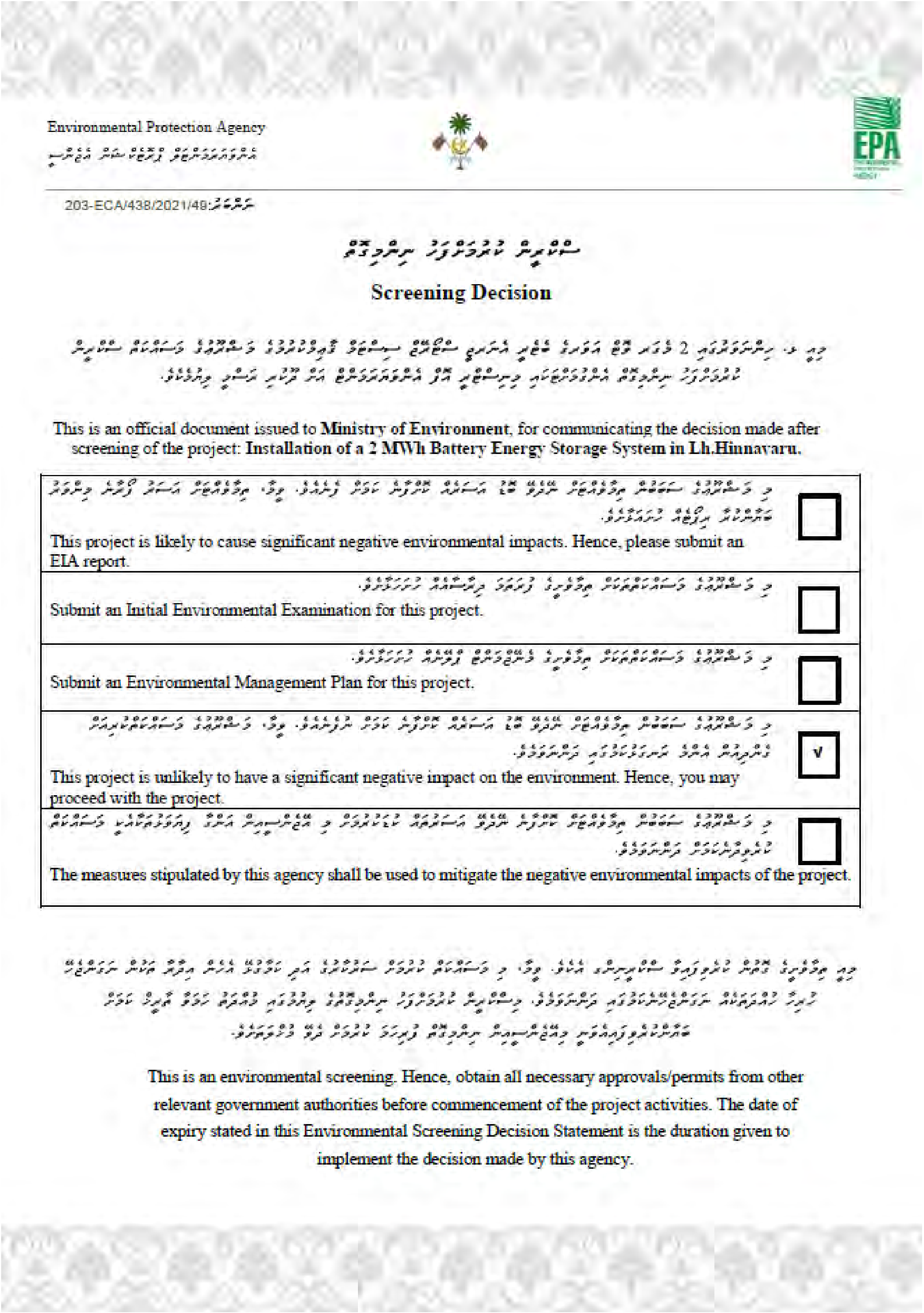
ނަންބަރު:203-ECA/438/2020/78

Screening Decision

This is an official document issued **Ministry of Environment**, for communicating the decision made after screening of the project for the **Installation of a 5 MWh** battery energy storage system **at Thinadhoo, Gaaf Dhaal Atoll.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency
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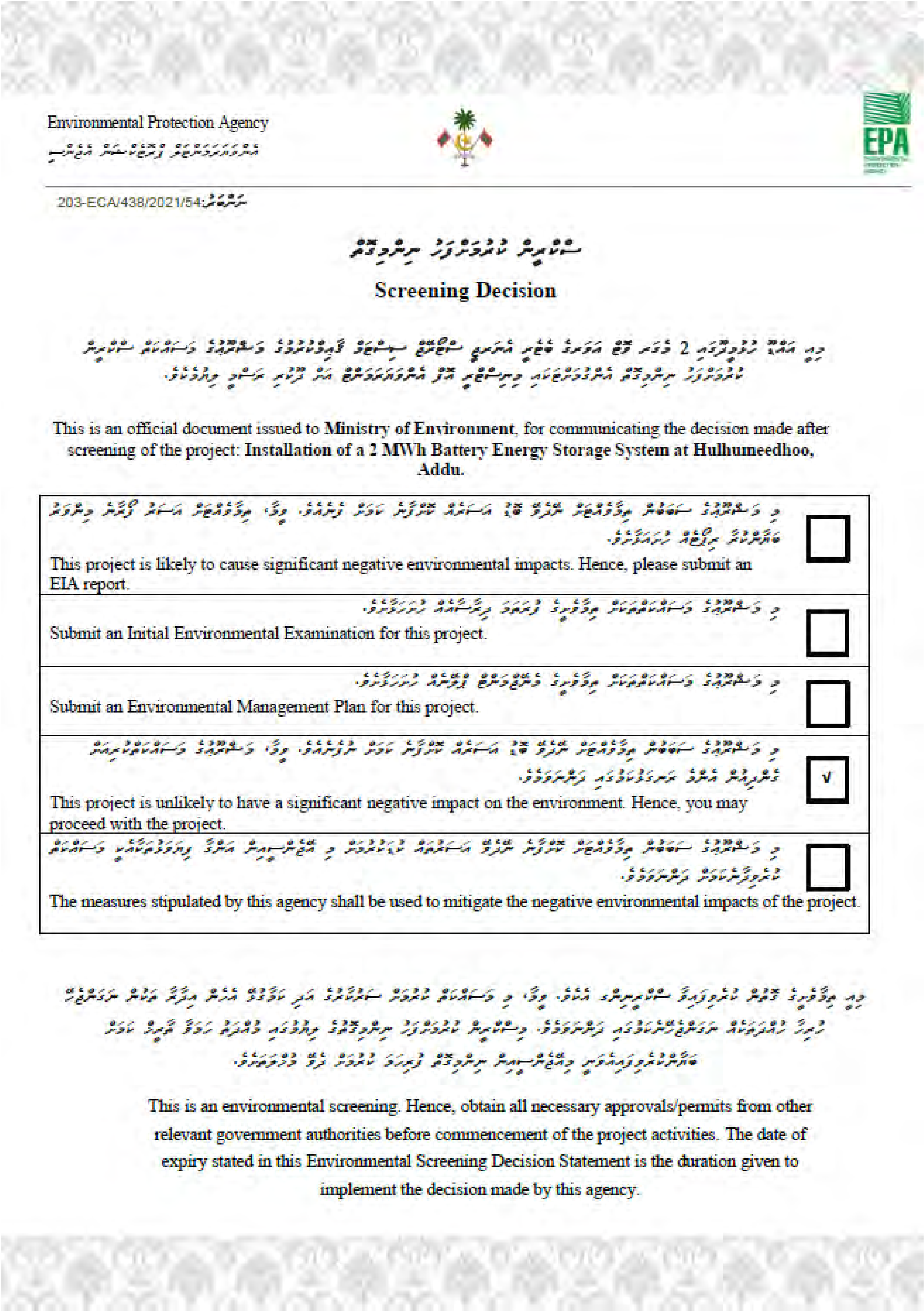
Screening Decision

This is an official document issued to **Ministry of Environment**, for communicating the decision made after screening of the project: **Installation of a 2 MWh Battery Energy Storage System in Lh.Hinnavaru.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

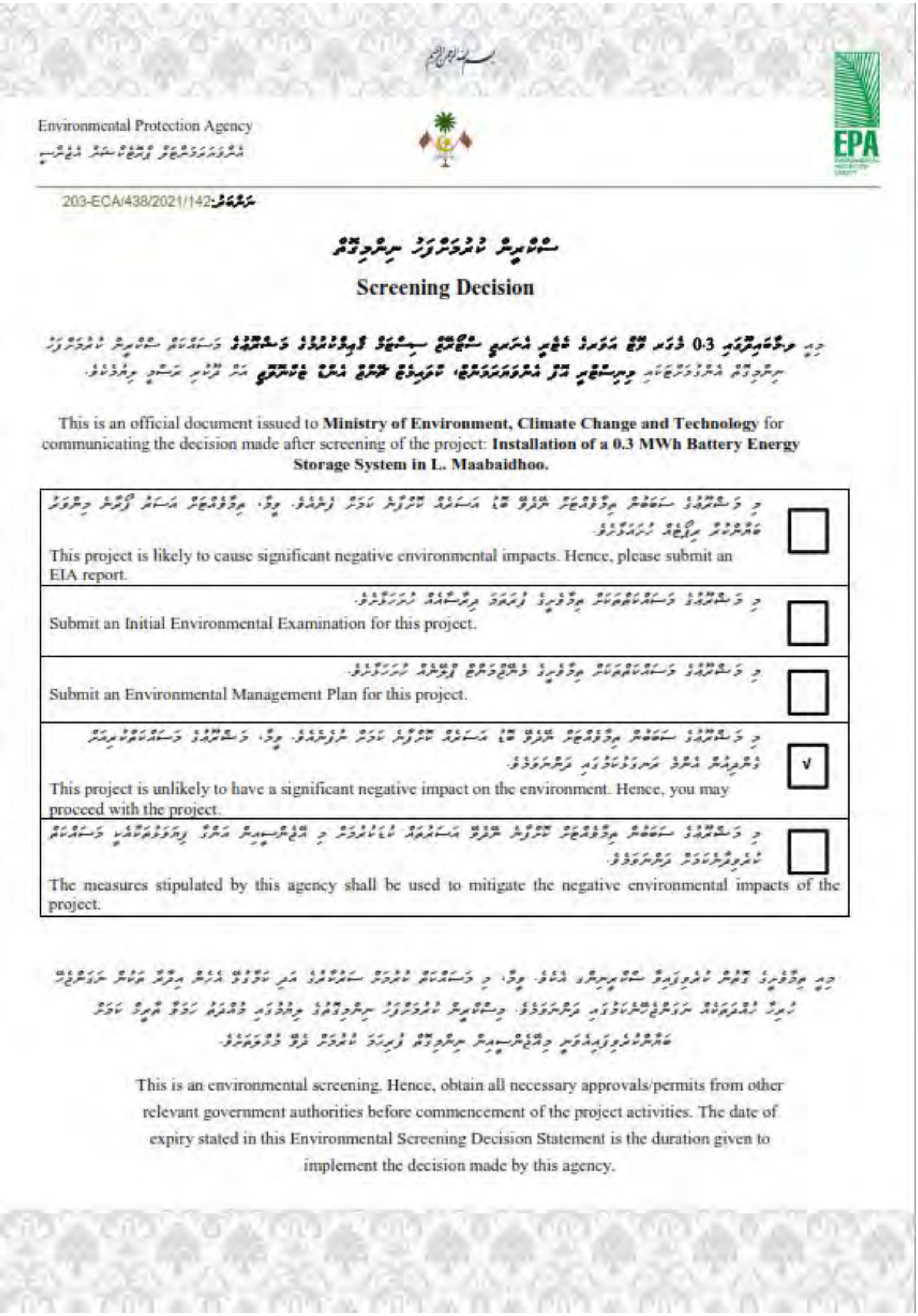
203-ECA/438/2021/54

Screening Decision

This is an official document issued to **Ministry of Environment**, for communicating the decision made after screening of the project: **Installation of a 2 MWh Battery Energy Storage System at Hulhumeedhoo, Addu.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

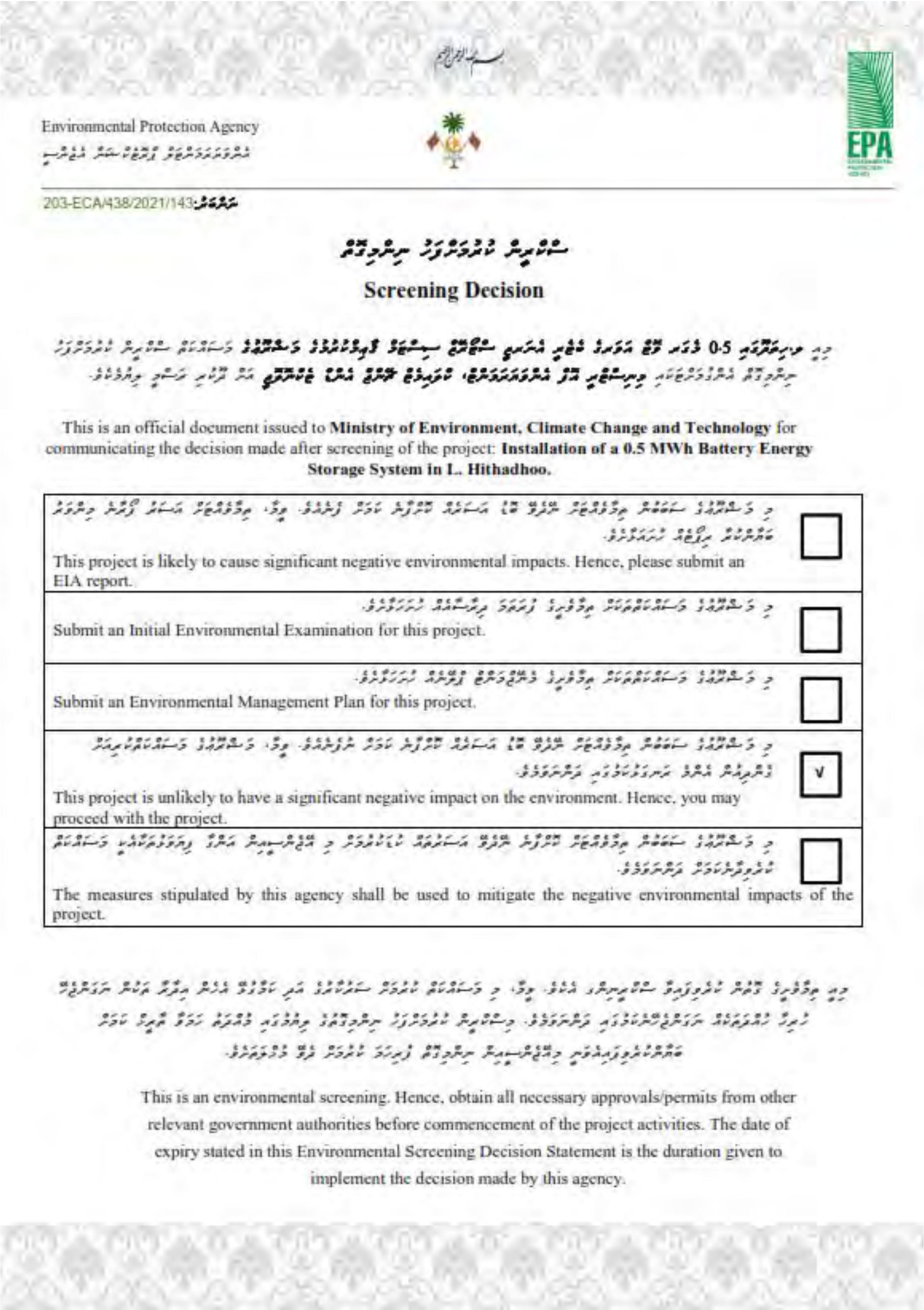
203-ECA/438/2021/142

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.3 MWh Battery Energy Storage System in L. Maabaidhoo.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.

Environmental Protection Agency

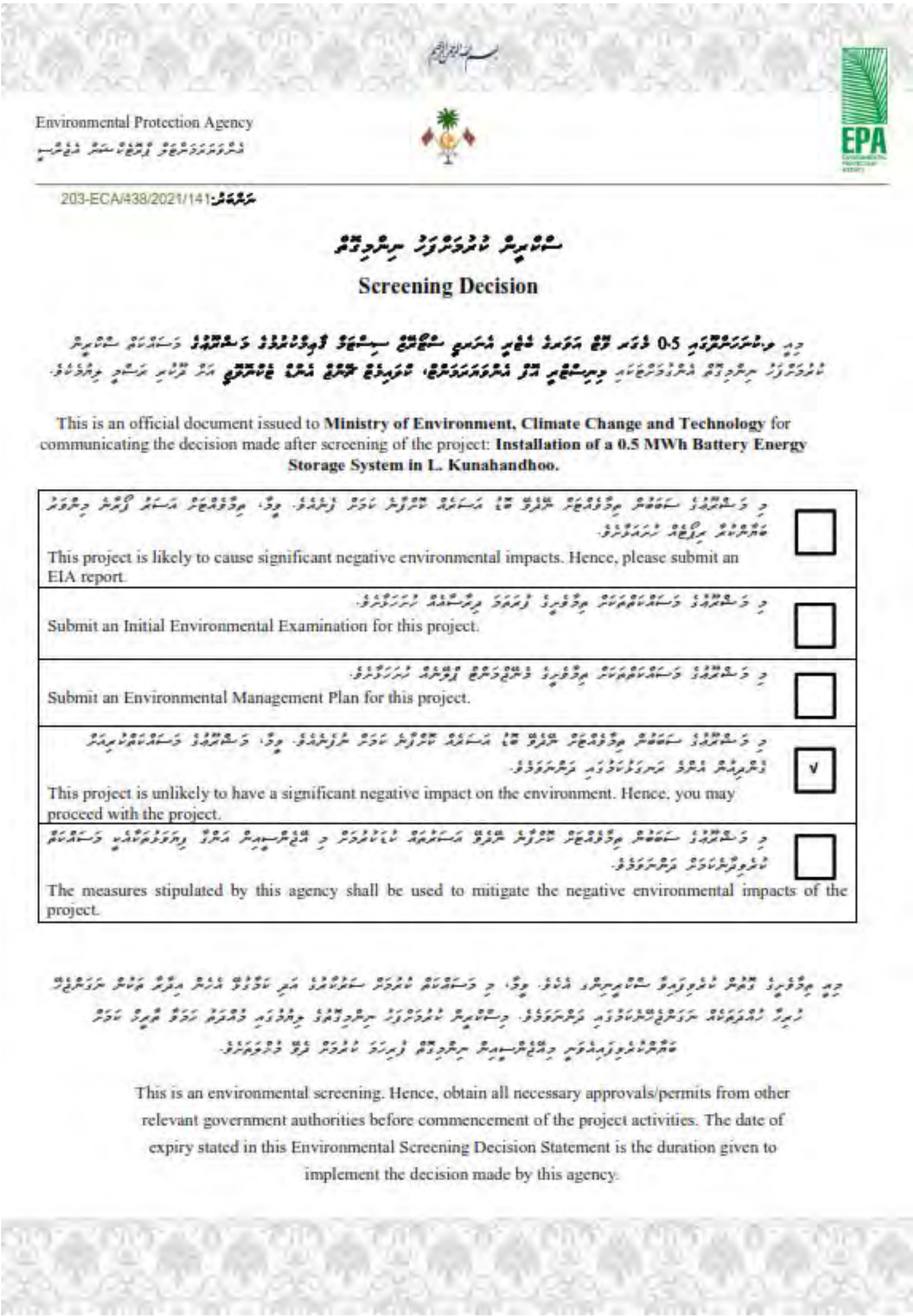
203-ECA/438/2021/143

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.5 MWh Battery Energy Storage System in L. Hithadhoo.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

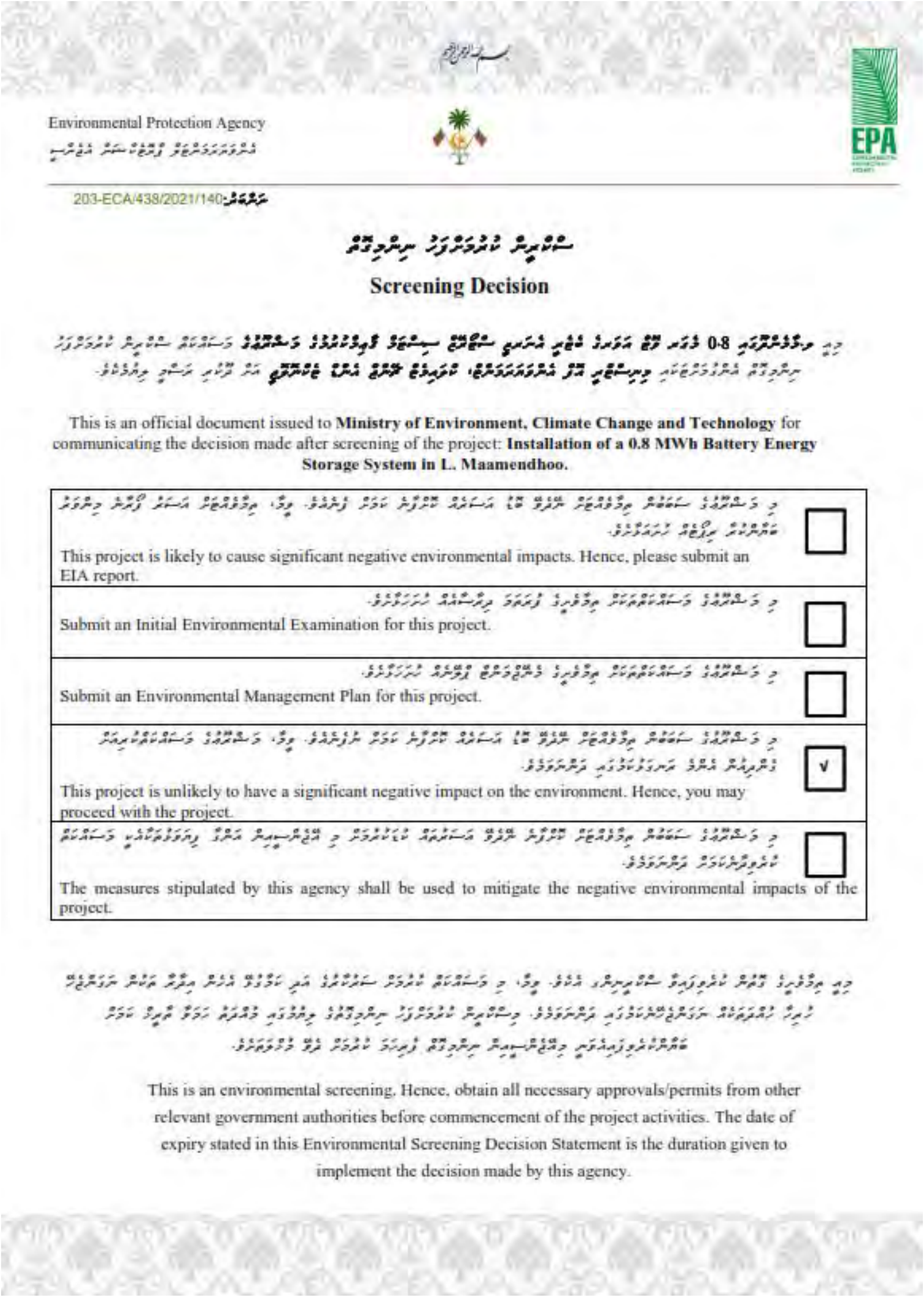
203-ECA/438/2021/141

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.5 MWh Battery Energy Storage System in L. Kunahandhoo.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

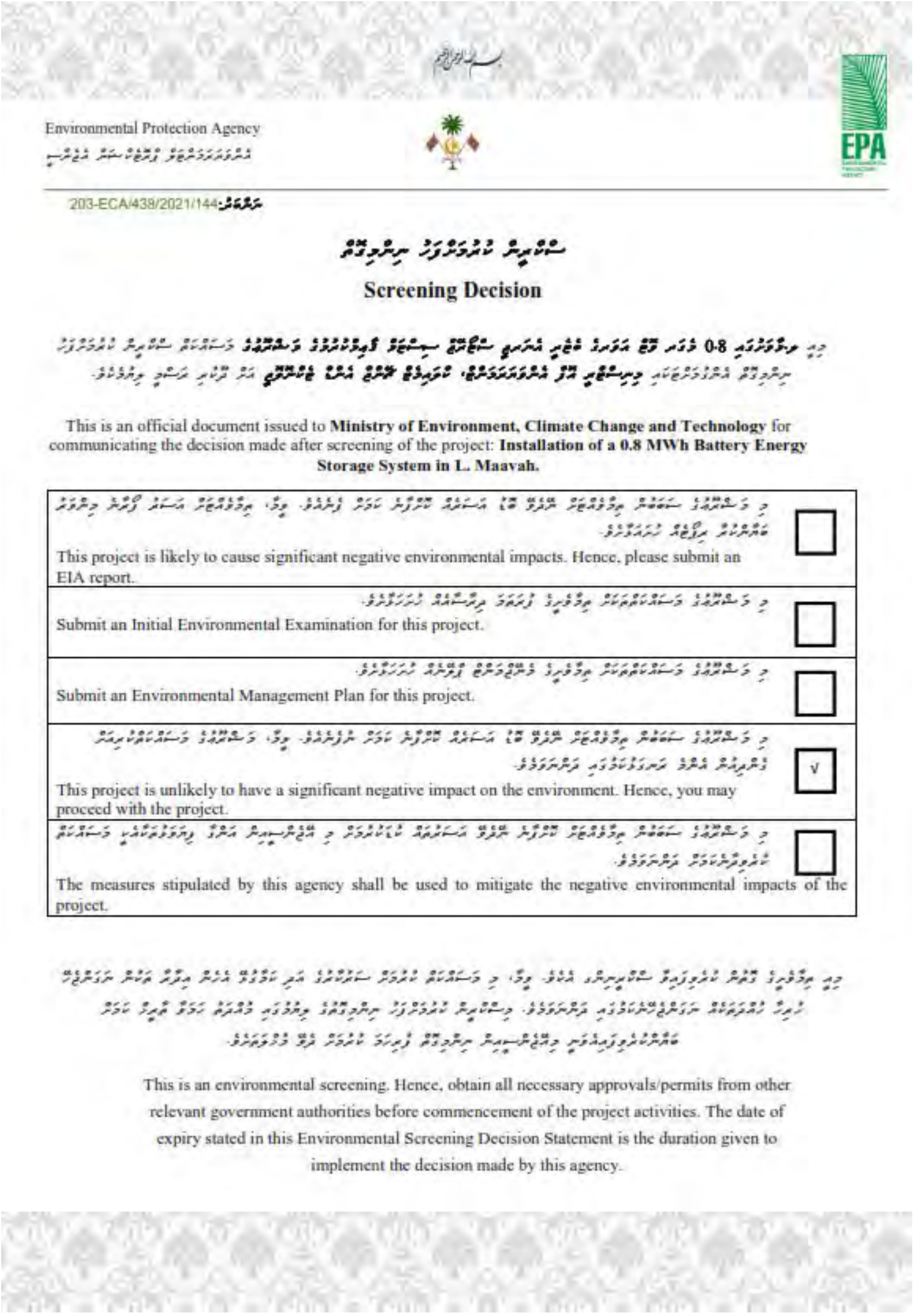
203-ECA/438/2021/140

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.8 MWh Battery Energy Storage System in L. Maamendhoo.**

☐	This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.
☐	Submit an Initial Environmental Examination for this project.
☐	Submit an Environmental Management Plan for this project.
☑	This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.
☐	The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

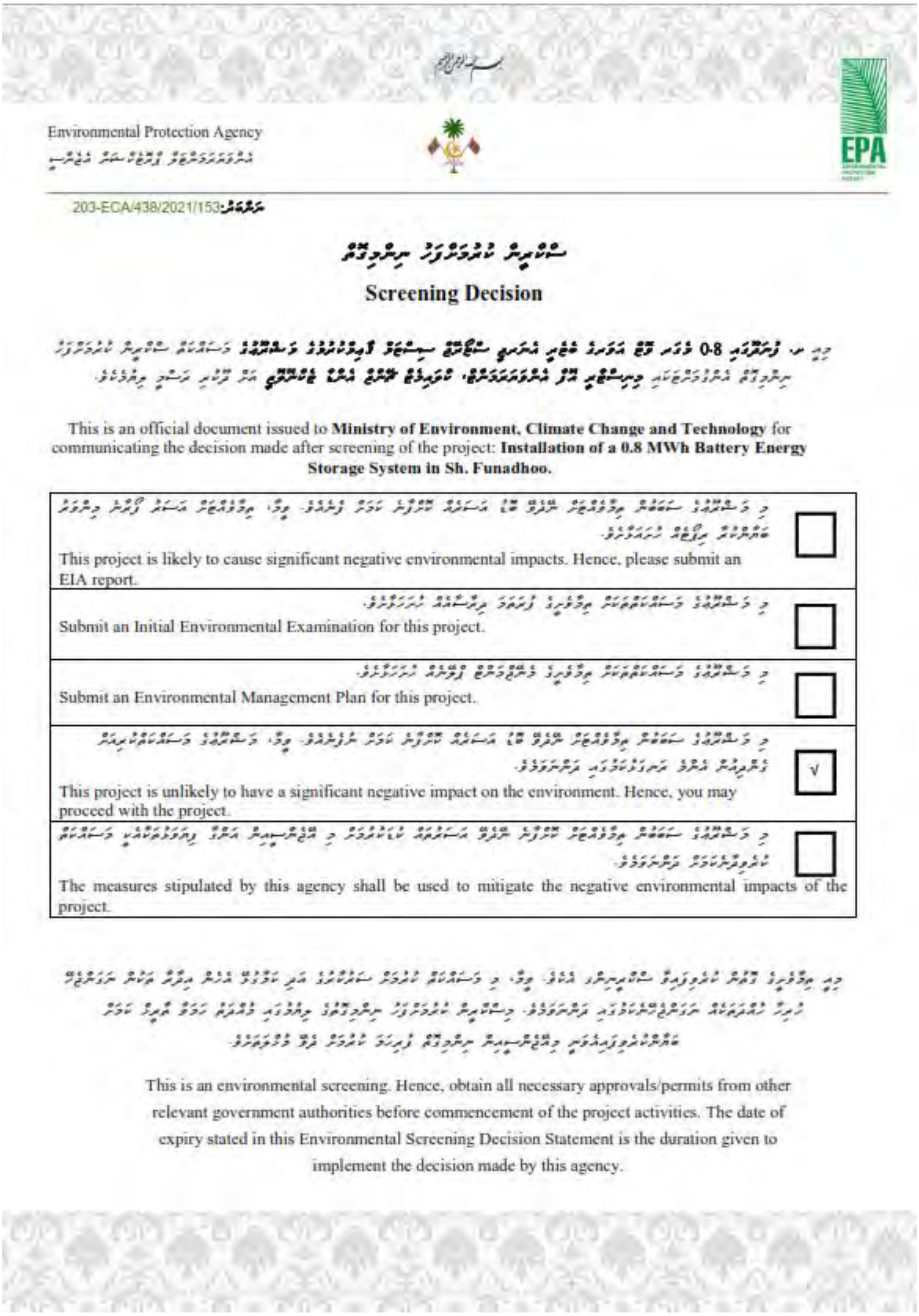
203-ECA/438/2021/144

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.8 MWh Battery Energy Storage System in L. Maavah.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

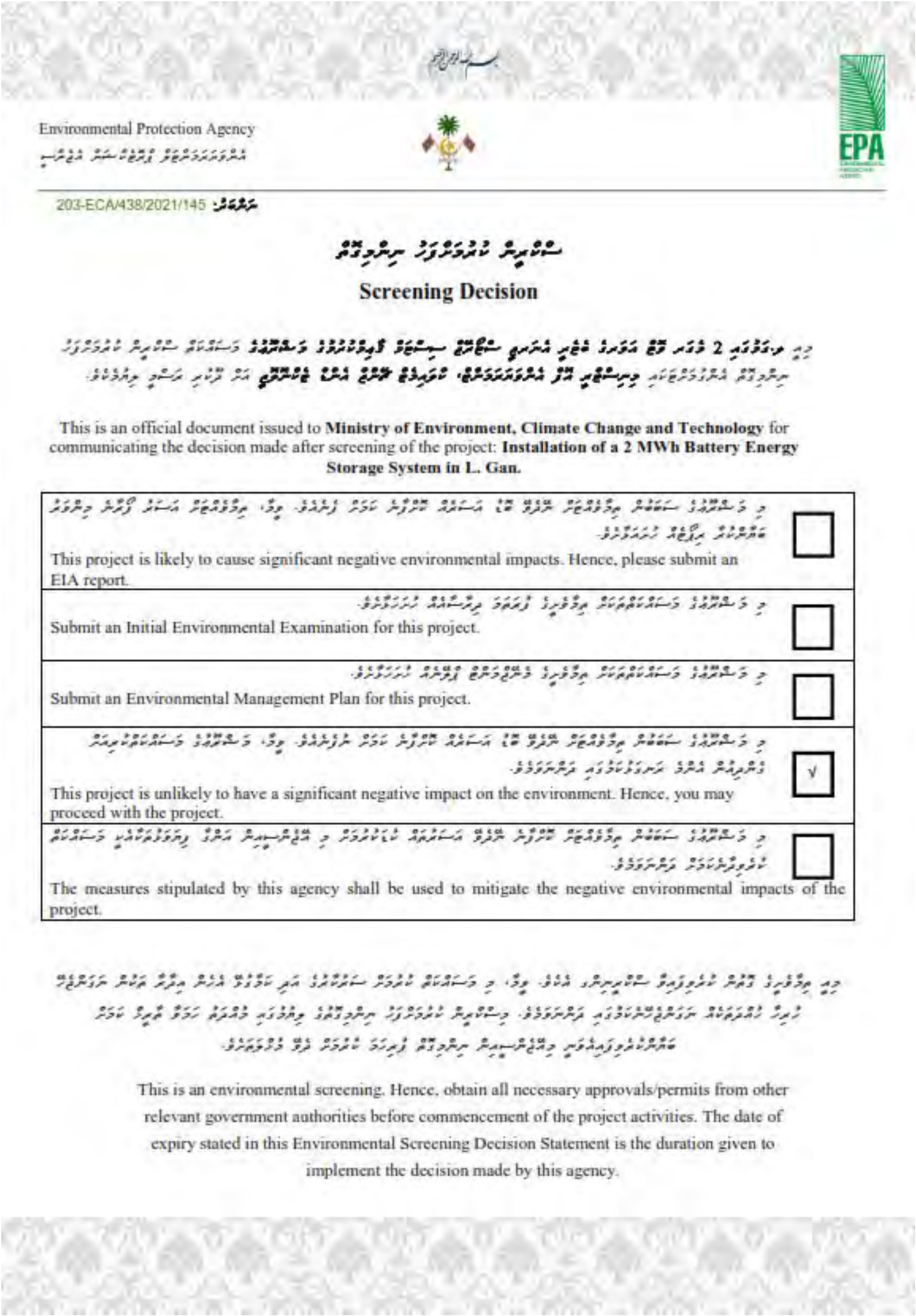
203-ECA/438/2021/153

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 0.8 MWh Battery Energy Storage System in Sh. Funadhoo.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

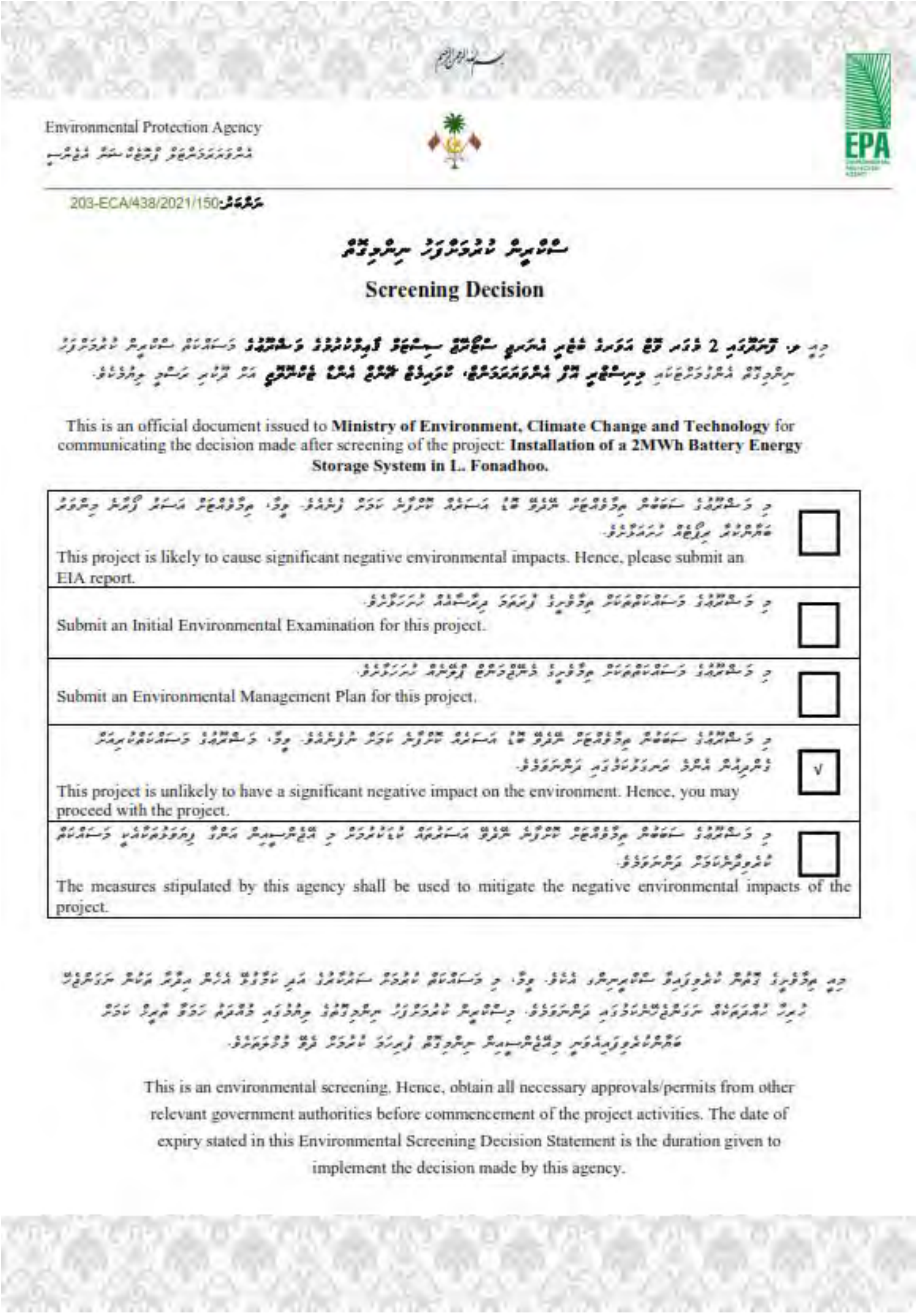
203-ECA/438/2021/145

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 2 MWh Battery Energy Storage System in L. Gan.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

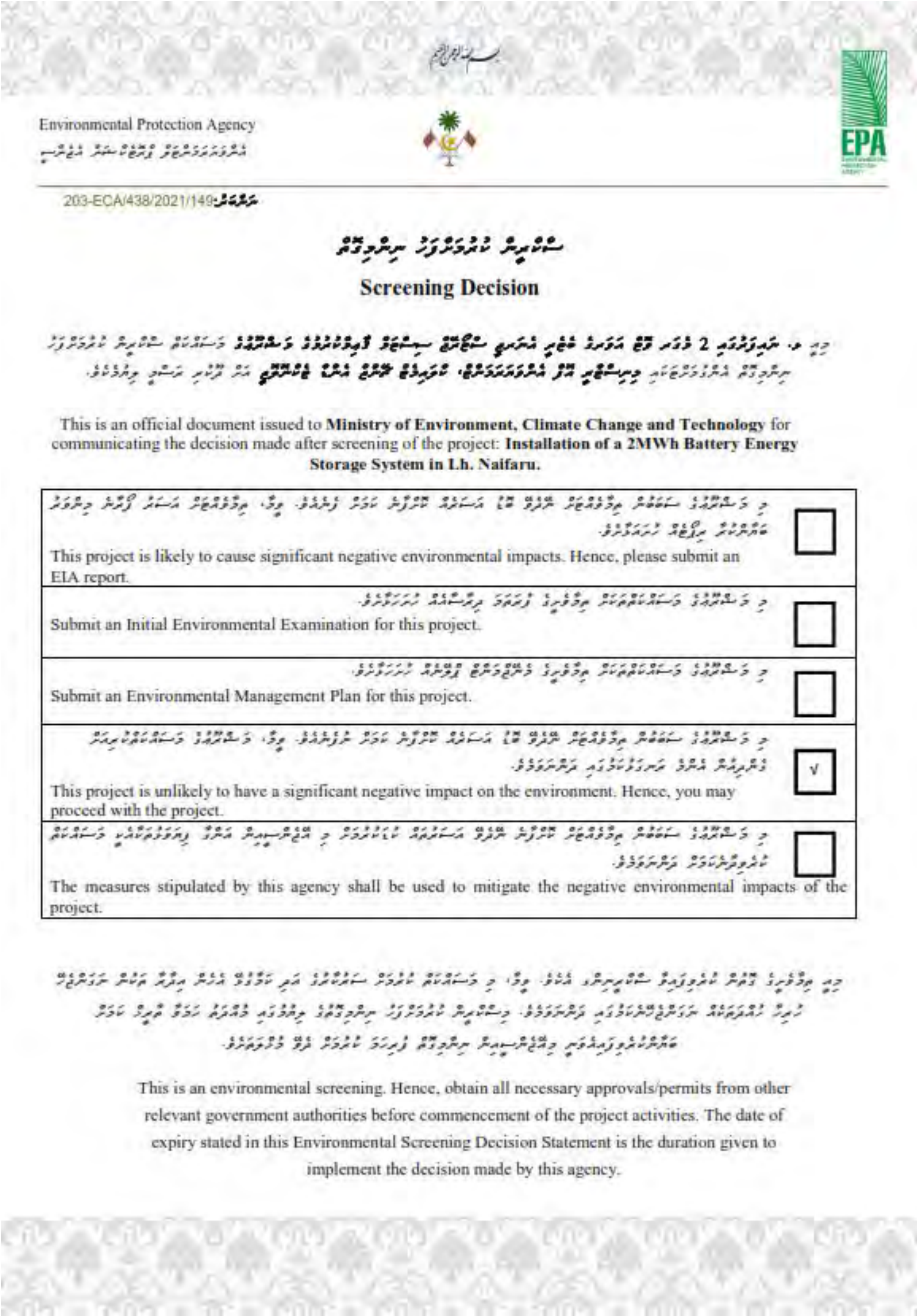
203-ECA/438/2021/150

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 2MWh Battery Energy Storage System in L. Fonadhoo.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

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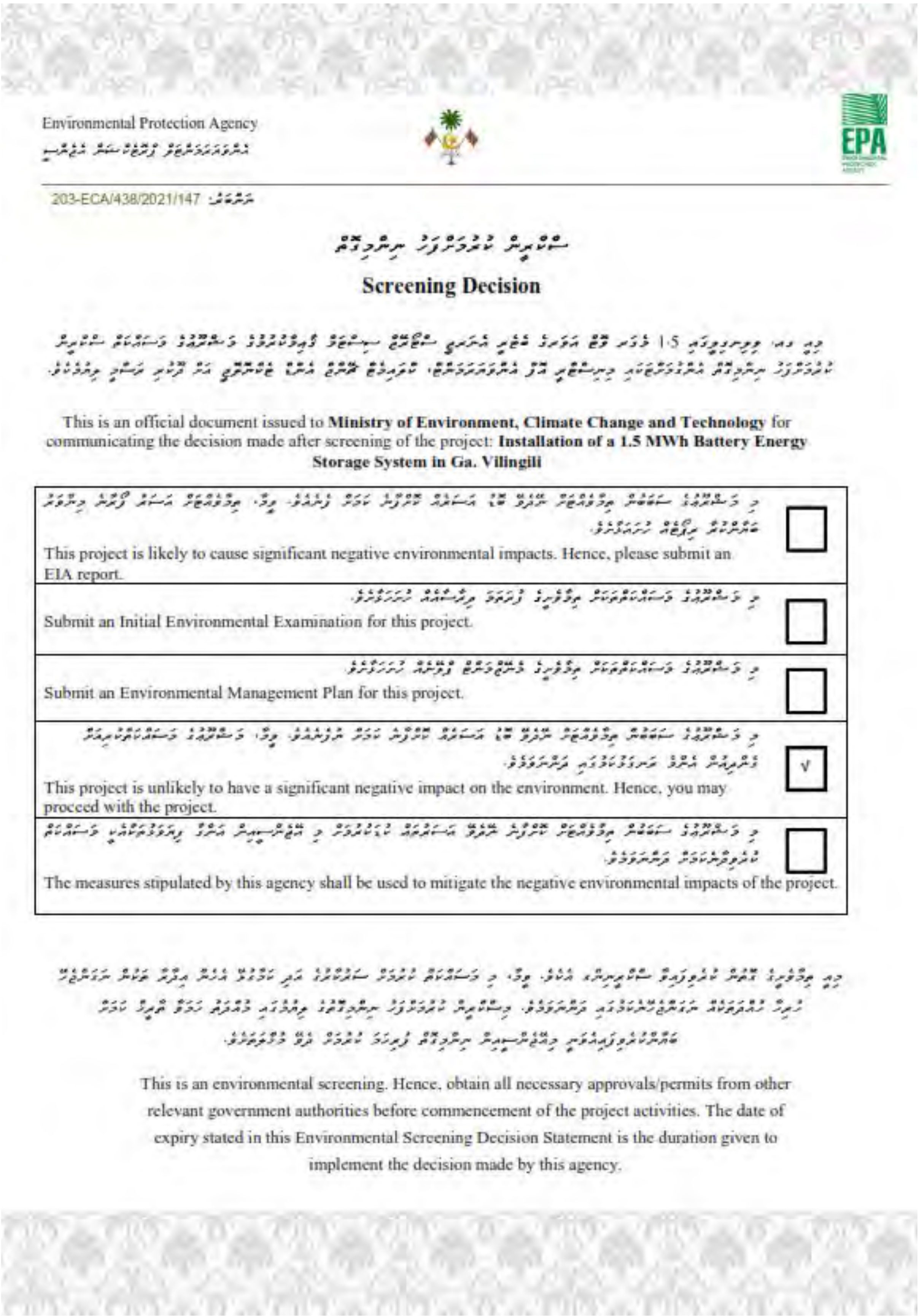
Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 2MWh Battery Energy Storage System in Lh. Naifaru.**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

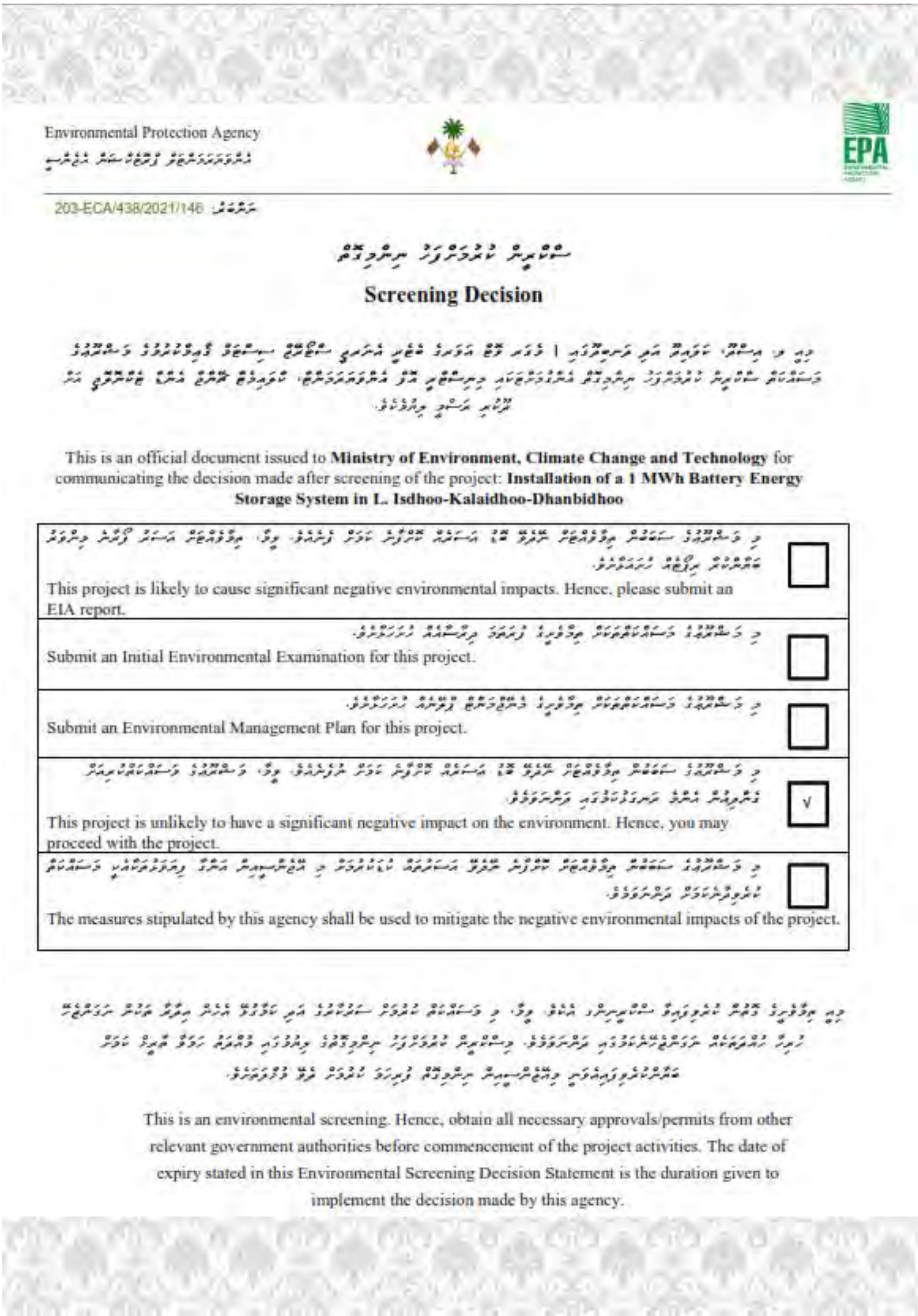
203-ECA/438/2021/147

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 1.5 MWh Battery Energy Storage System in Ga. Vilingili**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	☑
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.



Environmental Protection Agency

203-ECA/438/2021/146

Screening Decision

This is an official document issued to **Ministry of Environment, Climate Change and Technology** for communicating the decision made after screening of the project: **Installation of a 1 MWh Battery Energy Storage System in L. Isdhoo-Kalaidhoo-Dhanbidhoo**

This project is likely to cause significant negative environmental impacts. Hence, please submit an EIA report.	☐
Submit an Initial Environmental Examination for this project.	☐
Submit an Environmental Management Plan for this project.	☐
This project is unlikely to have a significant negative impact on the environment. Hence, you may proceed with the project.	√
The measures stipulated by this agency shall be used to mitigate the negative environmental impacts of the project.	☐

This is an environmental screening. Hence, obtain all necessary approvals/permits from other relevant government authorities before commencement of the project activities. The date of expiry stated in this Environmental Screening Decision Statement is the duration given to implement the decision made by this agency.