1. Policy Name:

National Policy on Renewable Hydrogen in Sri Lanka

2. Effective date: TBA

3. Introduction

i. Background:

Achieving energy independency and security is fundamental to the economic growth in Sri Lanka. The country has a tremendous potential to harness energy from renewable sources (e.g. solar, wind, hydro, biowaste). Hydro is a prevalent energy source with over 1,800 MW of installed capacity of large hydro & small hydro power plants, producing over 4.5 TWh annually (~ 40% electricity grid capacity).

In the recent developments in renewable energy-based electricity generation, solar power and wind power have been in major focus. Sri Lanka has a significant renewable energy potential of these sources with estimated 16 GW of solar and more than 50 GW of wind energy. In the Nationally Determined Contributions (NDCs) and Net-zero Strategy under the Paris Climate Accord obligations, renewable energy deployment is the key strategy. The medium-term policy target is to achieve 70% electricity generation from renewable energy sources by 2030. As of end 2024, contribution from land-based solar and wind power plants was 438 MW, and subsequently there was a tremendous rise in rooftop solar power with an aggregate capacity of more than 1,400 MW. Over the next 25 years, the country's power demand is projected to grow at an annual rate of ~5%, and Sri Lanka will need to add ~ 7,000 MW of additional fresh renewable energy, mainly consisting of ~4,700 MW of solar and ~1,800 MW of wind power.

The sporadic generation of solar energy and wind energy causes their power output to fluctuate depending on diurnal weather conditions, and energy storage is an essential feature to be introduced to address this issue. While battery energy storage and pump hydro storage have already been focused for energy storage, renewable hydrogen and its derivatives is another storage pathway pursued globally and maybe suitable for Sri Lanka to decarbonise the energy system. Meanwhile, the renewable energy potential would be in excess of electrical energy demand of the country. As such this abundantly available energy resource can be made use of to meet the energy requirement of various sectors of the country by converting renewable electricity to Hydrogen through the electrolysis process whereby electrical energy is converted to chemical energy. This Green Hydrogen or Renewable Hydrogen is a potential energy storage medium and can be used as a carrier of energy for various applications.

Hydrogen and its derivatives (ethanol, methanol, ammonia) can be thus integrated into the energy supply network as an energy carrier and a clean fuel for wide end-use sectors, such as a shipping fuel, Sustainable Aviation Fuel (SAF), etc. Further, hydrogen is used as a feedstock in chemical sector, and it can also be used as a building block to produce ammonia, a widely used fertilizer, which is an essential commodity for Sri Lanka and the second largest chemical made in the world. Hydrogen is also an important commodity in plastic, metal, petroleum and pharma industries and fits well with governments' push for local industrial growth.

Hydrogen is a fuel which requires special care. Hydrogen technologies can be sustainably adopted through establishing a network of production and supply at a competitive cost for end-

user needs across various sectors (e.g. transport, agriculture, high temperature industries including steel, chemicals, fertiliser, cement, glass, ceramic, tiles). In Sri Lanka, the first movers for hydrogen off-take could be high temperature industries - thermal applications in kilns and furnaces. Even a greater demand can be expected with hydrogen as an ingredient in SAF production, maritime ammonia, heavy-duty transport, chemical sector and power system resilience. Sri Lanka also has a substantial potential to convert bio-waste into bio-hydrogen (through biogas), further contributing to renewables and supporting the transition to a low-carbon economy.

Given its strategic geographical location and renewable energy capacity, Sri Lanka has the potential to emerge as a major hydrogen exporter, in a world where international shipping industry has ventured into hydrogen bunkering.

ii. The Need

Renewable hydrogen or green hydrogen, i.e. hydrogen generated using solar energy and wind energy, provides a unique opportunity for both centralized and distributed production and usage — From Gigawatt scale to microgrid scale - helping to meet the decarbonization target of achieving carbon neutrality in electricity generation by 2050, while simultaneously supporting the country's economic growth and reducing dependence on oil, coal and gas imports. Locally focused and interconnected green hydrogen production and supply network will play a crucial role in driving Sri Lanka's Net-zero agenda.

An integrated policy approach is vital for overcoming the initial constraints and reaching a minimum threshold for market penetration, resting on **three central pillars:**

(a) Identifying and enabling policy priorities,

(b) Establishing a governance system and enabling investment and partnerships together with policies

(c) Building national hydrogen strategies.

A national policy on renewable hydrogen and hydrogen derivatives envisages a smooth and systematic transition from fossil fuels to green energy at system level, including renewable hydrogen production, storage, supply, end-use and export, in a safe, transparent and sustainable manner.

iii. Purpose and Context

The National Policy on Renewable Hydrogen in Sri Lanka sets out government strategies and regulations aimed at managing the hydrogen production, inter-conversion (to/from its derivatives), storage, safe distribution, end-use and export, focusing on achieving a balance between security of energy supply, affordability, environmental sustainability, economic prosperity, social and ethical acceptability. The Policy provides guidance on standards that should be adhered to attract local and overseas investment to build interconnected renewable hydrogen infrastructure and develop hydrogen market. It also outlines the approval process that should be followed when equipment, components and products are imported and sourced locally to develop renewable hydrogen ecosystem in Sri Lanka.

The Policy emphasises the commitment of the Government, in ensuring management of safe handling of hydrogen and its derivatives, along with the effective management of hydrogen infrastructure, by enforcing compliance with the latest international standards. This Policy mandates the integration of hydrogen-related safety, production, storage, distribution and end-use regulations into the national governance framework. It is designed to complement and align with existing national policies on energy, environmental protection, health & safety and equality, fostering a sustainable hydrogen economy in line with United Nations sustainable development goals (UN SDGs). The major policy objectives are:

(i) To Ensure the safe and sustainable management of hydrogen and its derivatives at every stage of their life cycle and optimize resource consumption;
(ii) To ensure rapid realization of a well-trained human resource pool within the country to support the growth of renewable hydrogen ecosystem and green economy;
(iii) To ensure the smart management system of hydrogen and its derivatives by deploying appropriate information management tools;
(iv) To enable Sri Lanka to achieve a Just Energy Transition while enabling a resilient national energy system.

iv. Rationale

The rationale behind the National Policy on Renewable Hydrogen in Sri Lanka is to leverage hydrogen and its derivatives as clean energy carriers, primarily produced from renewable sources, to decarbonize sectors that are difficult to electrify, like heavy industries and long-haul transport, chemical and other industrial sectors, thus contributing significantly to achieve country's net-zero emissions goals by providing a low-carbon fuel alternative to fossil fuels in areas where other options are limited. This is achieved by promoting necessary infrastructure development and market incentives to scale up the production and use of renewable hydrogen across various sectors and export to global markets.

4. Guiding Principles

The National Policy on Renewable Hydrogen in Sri Lanka:

- Recognizes the economic potential of establishing a hydrogen ecosystem and a value chain for Sri Lanka
- Recognizes the importance of prosperity and wellbeing of people in Sri Lanka and its environment while promoting sustainable development;
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- Recognizes the importance of developing capacities, creating awareness and carrying out appropriate research by relevant authorities, in relation to renewable hydrogen ecosystem;
- Recognizes the risks that may be associated with the adaptation of renewable hydrogen ecosystem;
- Reaffirms the commitment to the obligations of international conventions and international organisations, namely IEA, IRENA and UN, but not limited to them;
- Recognizes the importance of making compliance with personal health & safety and environment standards related to the use of hydrogen and its derivatives;
- Recognizes the importance of close coordination among stakeholder institutions in management of hydrogen and its derivatives, containing

hazardous substances/chemicals, from production to final disposal ensuring circularity;
- Recognizes the importance of Equality, Equity, Diversity and Inclusivity at all levels of renewable hydrogen ecosystem in Sri Lanka.

5. Policy Statements

Policy statements are identified under the key aspects related to the introduction of hydrogen in the country - Energizing the Economy, Leveraging the Knowledge, A Productive Ecosystem, Safety and Security, Technology Forefront, as:

(a) Energizing the Economy

5.1 Sustained Economic Benefits

- Development and implementation of entire green hydrogen ecosystem in the country will be done assuring sustained economic benefits to the country in a broad national perspective, strictly at every stage, to achieve the sustainable economic development of Sri Lanka.

5.2 Energy Security, Emission Reduction and Circular Economy

- Energy security by renewables as well as carbon emission reduction targets driven by circular economy theories will be considered as the underpinning objects in the development of green hydrogen ecosystem in the country.

(b) Leveraging the Knowledge

5.3 Research, Innovation and Knowledge Creation

- Priorities in research, innovation and knowledge creation with a special focus on developing hydrogen ecosystem, risk assessment, management & communication at all levels including individual health & safety and sustainable environment shall be identified, and necessary steps shall be taken accordingly.

5.4 Development of Competencies

- Acquisition and development of competencies in all aspects in management and safe handling of hydrogen, its derivatives and all components at whole system level will be taken as a priority. In this regard, the obligations made under the multilateral agreements (MAs) in relation to management and safe handling of hydrogen and its derivatives in ecosystem, will be implemented.

5.5 Dissemination of Information

- Dissemination of relevant information of renewable hydrogen ecosystem at all levels shall be guaranteed through the institutional structure to the maximum possible level within the national legal framework.

5.6 Stakeholder Participation

- Public awareness, education, capacity building and technological cooperation and sharing knowledge & best practices will be enhanced to ensure stakeholder participation in the decision making and implementation levels.

(c) A Productive Ecosystem

5.7 National Secretariat

- A national secretariat will be established under Sri Lanka Sustainable Energy Authority to manage country's renewable hydrogen ecosystem and coordinate all responsible public and private sector institutions, organisations and individuals, nationally and internationally. Decision making, training, research & development (R&D) and international cooperation & partnerships in matters pertaining to sustainable management and safe handling of hydrogen, its derivatives and all components at whole system level shall be coming under the purview of this Secretariat.

5.8 Steering Committee & Expert Committee

- A Steering Committee shall be established to oversee the adoption of this Policy, and an Expert Committee shall be convened whenever the Steering Committee requires expert inputs on the subject, in the process of adopting the Policy.

5.9 Legal & Institutional Frameworks

- Effective enforcement and implementation of related laws, regulations, guidelines and standards will be ensured by clear allocation of responsibilities within the most appropriate legal and institutional frameworks.

5.10 Institutional Coordination

- Effective coordination of all related government institutions and private organisations will be ensured in order to realize the effective implementation of this Policy.

5.11 Monitoring & Review

- Regular monitoring of application of this Policy will be strengthened and institutionalized in line with the latest developments and standards and this Policy will be reviewed at appropriate intervals. Assessment of policy implementation efficiency, regulatory compliance and identification of emerging risks, will be taken into serious consideration in the monitoring & review process.

(d) Safety and Security

5.12 Personal Health & Safety

- Strategies and actions regarding management and safe handling of hydrogen, its derivatives and hydrogen infrastructure will be strengthened in order to ensure personal health & safety and to protect the environment.

5.13 Standards & Regulations

- Sri Lanka shall place utmost importance in enforcement of regulations and implementation of necessary measures in line with most up-to-date national and international standards, clear allocation of tasks and responsibilities with appropriate authorities, as a high priority.

5.14 Risk Management

Risk analysis, assessment, management and communication will be strengthened at all levels. In this regard, an emergency response network shall be established covering the whole country (including offshore facilities and export terminals) connected to the existing Disaster Management Centre, allocating appropriate trained staff and all other required resources.

(e) Technology Forefront

5.15 Tools & Technologies

- Sustainable adaptation of hydrogen technologies shall be established through most up-to-date appropriate tools and technologies to establish renewable hydrogen ecosystem and its sustainable operation at all levels.

5.16 Data Management System

- A national level data management system will be established with appropriate confidentiality to maintain a database on hydrogen and its derivatives.

6. Policy Goals

Make green hydrogen the third energy carrier to complete the energy transition and make Sri Lanka a leading energy exporter

7. Applicability and Scope

The National Policy on Renewable Hydrogen in Sri Lanka establishes a management framework to overcome barriers in transitioning renewable hydrogen and hydrogen derivatives from niche applications to widespread use while ensuring safety.

The Policy recommends a robust process of ensuring safe handling of hydrogen at each segment of energy system by strictly following national and international standards. It also emphasises regular review of all hydrogen related safety protocols and risk assessments in line with up-to-date international best practices. It also proposes to incorporate new data, information and case studies arising from research & development, new findings/learnings from incidents and maintain an efficient communication pathway across the hydrogen sector, including all processes in the ecosystem in Sri Lanka.

The National Renewable Hydrogen Policy in Sri Lanka compliments other national and sectoral policies and regulations including National Energy Policy, National Chemical Management Policy, National Occupational & Safety Policy and National Environment Policy. The Policy guides the development of downstream markets for green products that incorporate green hydrogen such as green-methanol, green-ammonia, and SAF. It also lays the legal basis for aligning hydrogen and associate sectors with other national policies, including those listed above.

Government is taking substantial measures to provide the necessary financial incentives and non-financial measures for the private sector investors to develop a renewable hydrogen value chain and infrastructure. These include, but not necessarily limited, to import tariff relief, favourable taxation, simplified procedures (e.g. a central entity for development coordination, process re-engineering), Special Economic Zone support focally coordinated

approval process, subsidies for using locally manufactured components, etc.). Other measures include, but not necessarily limited to, introduction of the *Renewable Hydrogen Strategic Plan and Roadmap*, establishment of necessary frameworks for ensuring environmental health and safety compliance. They require formulation of Multilateral Agreements (MAs) and Memorandums of Understanding (MoUs) involving local and overseas stakeholders and organisations. The Policy provides guidance for formulation of MAs and a robust process in implementing them.

8. Implementation Strategies

The National Renewable Hydrogen Policy in Sri Lanka outlines:

- Strategies to scale-up production of renewable hydrogen and its derivatives and lay the foundations for a renewable hydrogen economy in Sri Lanka by 2030;
- Pathways to stimulate investment to develop renewable hydrogen ecosystem in the country;
- Strategies to foster technology partnerships with international partners/companies to ensure that cutting-edge equipment and components can be manufactured, and systems can be developed in Sri Lanka for local and overseas markets.

The Policy also provides strategies to capture and sustain the economic benefits of anticipated growing the hydrogen economy, supporting innovation, stimulating investment to develop the local supply chain, training required skilled workforce at all levels of value chain and export opportunities for Sri Lanka.

i. Technology & Capacity Building

Strategies coming under the technology & capacity building aspects are, to:

1. Adapt most up-to-date appropriate tools and technologies for the implementation and monitoring of a renewable hydrogen ecosystem at all levels;
2. Prioritise human resource development such as skills training at all levels, capacity building, competence building, sharing knowledge and best practices for all stakeholders in renewable hydrogen ecosystem;
3. Identify key locations for the development of hydrogen storage and distribution hubs, particularly near renewable energy production sites, major industrial zones, and export terminals. These storage hubs will ensure that hydrogen is stored and distributed efficiently, meeting both domestic and export demand and ensuring that hydrogen supply chain meets the best international safety standards;
4. Promote and foster knowledge and best practice sharing mechanisms at all hydrogen and associated sites (including offshore facilities and export terminals) and encourage regular self-assessment practices, benchmarks and safety drills against national and international standards;
5. Prioritise research, innovation and knowledge creation with a special focus on developing hydrogen ecosystem, risk assessment, management and communication at all levels including individual health & safety and sustainability of environment;
6. Streamline the flow of hydrogen and hydrogen derivatives from production sites (including offshore production sites) to storage facilities, end-use distribution sites and export terminals using appropriate IT tools, through appropriate regulations and documentation;
7. Increase capacity for dynamic monitoring of all sites of hydrogen value chain using appropriate IT tools, enabling public reporting;
8. Ensure all sites in hydrogen ecosystem comply national & international standards;

9. Introduce tools/instruments to apply analytical methods for hazard identification and risk assessment wherever necessary, in line with the national and international standards;
10. Ensure conformity with national legislations and international conventions as well as other agreed policies in the production, storage, transport, inter-conversion, end-use, export and safe vent/disposal of hydrogen, derivatives and all associated components. In this context, the national regulations and standards shall be harmonized and streamlined with most up-to-date international regulations and standards. Wherever it is appropriate, international regulations would be adapted to suit local needs of the country;
11. Establish regulations and protocols for internal transport of hydrogen and derivatives (by road, rail, air, navel) to ensure safety of all individuals, assets and environment;
12. Increase awareness of all stakeholders and general public on domestic use of hydrogen, its derivatives and associated products containing hazards, regardless of their race, socio-economic status, or gender and other characteristics;
13. Encourage and incentivize journalists/media personnel to disseminate information on safe adaptation of hydrogen technologies and the pros and cons of that, through mass media and all types of communication channels, to help public acceptance;
14. Bring necessary regulations to integrate appropriate venting, disposal and other facilities for hydrogen and its derivatives at value chain, and to comply with required environmental regulations;
15. Promote application of sustainable practices and low-carbon methods for interchange of hydrogen and its derivatives (e.g. ammonia-to-hydrogen, hydrogen-to-ammonia and methane to hydrogen);
16. Establish/Promote industry-university-government interactions/partnerships to encourage research & development to generate new knowledge on sustainable practices and approaches, benefitting country's hydrogen ecosystem and country's standing in global knowledge generation indices;
17. Promote industrial chemical symbiosis in industrial cluster settings to use renewable hydrogen and its derivatives within production sites themselves, and to minimise Scope 3 emissions;
18. Strengthen local training institutions by providing facilities and expert staff to broaden the technical skills training at all levels required for hydrogen infrastructure and associated developments;
19. Support local training institutions to train workforce in non-technical areas of hydrogen value chain (e.g. green business models, supply chain management, life-cycle assessment, recycling and circularity, carbon offsetting);
20. Facilitate all stakeholders in the hydrogen value chain to provide a compulsory training on emergency response to their staff (including regular refreshers) to establish emergency preparedness plans;
21. Strengthen existing laboratory facilities and establish new laboratory facilities at distributed level or mobile facilities for analysis and certification of quality of hydrogen (both gaseous and liquified hydrogen) and its derivatives to support adoption of hydrogen technologies (e.g. PEM fuel cells) at local and export market levels;
22. Establish a national energy research and innovation facility alongside a dedicated industry zone/park to develop and manufacture system units to support renewable hydrogen development;
23. Promote, facilitate and support local manufacturing capabilities of equipment (e.g. gas chromatographs, electrochemical workstations), devices (e.g. electrolyzers, fuel cells, compressors), components (e.g. pipes, regulators, fittings, sensors);
24. Develop and introduce the *Renewable Hydrogen Strategic Plan and Roadmap*.

ii. Responsibility and Authority

Strategies coming under the responsibility and authority building aspects are, to:

25. Develop a strong mechanism to expedite the decision making across all processes in order that Sri Lanka meets its energy security by renewables as well as carbon emission reduction targets:
26. Establish a national coordinating secretariat to manage country's hydrogen ecosystem under Sri Lanka Sustainable Energy Authority to coordinate all responsible institutions, public and private sector organisations and individuals at national and international levels;
27. Provide the necessary financial incentives and non-financial measures for the private sector investors and overseas government investors to develop the renewable hydrogen value chain and infrastructure. These include, but not necessarily limited, to import tariff relief, favourable taxation, simplified procedures (e.g. central entity for development coordination, process re-engineering), Special Economic Zone support, focally coordinated approval process, subsidies for using locally manufactured components, etc.);
28. Develop an appropriate mechanism to expedite the approval processes for investments in hydrogen and derivatives production and storage sites, transportation, supply chain and export;
29. Facilitate the rapid deployment of green hydrogen production projects through public-private partnerships (PPPs) through appropriate business models. These models will ensure that both local and international private companies can participate in large-scale interconnected renewable hydrogen production, supply chain and end-use projects in the country, while assuring the attainment of economic benefits to Sri Lanka;
30. Introduce a rating/grading system for all sites in hydrogen value chain based on comprehensive hazard identification and risk assessment, in conjunction with regular inspections (by appropriate authorities);
31. Coordinate with the Ministry of Energy and Sustainable Energy Authority to encourage and promote dissemination of associated risks (including health and safety risks) from hydrogen and its derivatives as well as good practices.

iii. Monitoring and Evaluation

Strategies coming under the monitoring and evaluation aspects are, to:

29. Develop a strong monitoring mechanism in order to ensure the efficient, effective and rapid development of hydrogen ecosystem in the country;
30. Establish mechanisms by relevant authorities to improve methods of adapting hydrogen technologies and streamline them;
31. Establish a dynamic system for integrated asset inspection by a team of experts consisting necessary expertise to regularly inspect, support and ensure operators and users at all levels, comply with the most up-to-date procedures and practices;
32. Introduce a national database to monitor hydrogen ecosystem real-time, download required information as and when required (e.g. quantities of hydrogen and hydrogen derivatives, all associate components and assets) through coordination with all stakeholders along the value chain and develop a central mechanism to manage data with appropriate confidentiality;
33. Work with all stakeholders to strengthen National Green Reporting System to make sure hydrogen, hydrogen derivatives, all associate components and assets at whole ecosystem are reported and the national database is regularly updated;
34. Coordinate with all stakeholders in country's hydrogen ecosystem to exchange knowledge, best practices, incidents and learnings from incidents;

35. Coordinate with all stakeholders in country's hydrogen ecosystem to update international new knowledge, best practices, incidents and learnings from incidents;
36. Take appropriate action in strengthening prevention and preparedness of hydrogen and its derivatives associated accidents across the country (including offshore production sites and export terminals) by working with relevant agencies;
37. Incorporate regular risk assessment and hence implement risk avoidance/control/mitigation/transfer into all sites in hydrogen ecosystem, including compulsory Personal Protective Equipment (PPE) and chemical exposure measuring /monitoring methods and equipment;
38. Strengthen the existing legal framework to impose legal actions and penalties for action of non-compliance and inappropriate sites and facilities in the hydrogen value chain;
39. Establish systems to track embodied emissions of all individual segments of hydrogen ecosystem by following established international standards;
40. Publish and update the obligations of Sri Lanka under multilateral agreements and obligations of all stakeholders to comply them;
41. Establish an emergency response network covering the whole country (including offshore facilities) connected to the existing Disaster Management Centre, allocating appropriate trained staff and all other required resources;
42. Establish a dedicated section with trained staff in Sri Lanka Standards Institution on hydrogen national standards in line with international standards which will oversee compliance of whole value chain with national standards and support Sri Lanka Accreditation Board to ensure international benchmarked accreditation across the value chain;
43. Establish a mechanism at the procurement stage for hydrogen technical expert committee to evaluate the quality and standards and (if they meet mandatory quality and standards) authorise all importing and locally sourced equipment, components and systems in hydrogen ecosystem, including offshore facilities and export terminals.

Glossary

Bio-Hydrogen – Hydrogen produced from biological processes, such as biogas from bio-waste.

Carbon Neutrality – Achieving net-zero carbon dioxide emissions by balancing emissions with carbon removal or elimination.

Circular Economy – A system aimed at eliminating waste and the continual use of resources through recycling and sustainable practices.

Control of Major Accident Hazards (COMAH) – A regulatory framework designed to prevent and mitigate the consequences of major industrial accidents involving hazardous substances, including hydrogen and its derivatives, by enforcing strict safety protocols and risk management measures.

Decarbonization – The process of reducing or eliminating carbon dioxide (CO_2) emissions from energy production and industrial activities.

Electrolyzer – A device that uses electricity to split water into hydrogen and oxygen through electrolysis.

Embodied Emission – The total greenhouse gas emissions associated with the production, processing, and transport of a product or service.

Energy Security – Ensuring a stable and affordable energy supply to meet the country's needs.

Green Hydrogen – Hydrogen produced using renewable energy sources such as solar or wind power without emitting carbon dioxide.

Hydrogen Ecosystem – The entire value chain of hydrogen production, storage, distribution, usage, and disposal.

Hydrogen Embrittlement – The weakening of metal due to absorption of hydrogen, making it brittle and prone to failure.

Hydrogen Fuel Cell – A device that generates electricity by combining hydrogen with oxygen, producing water as a by-product.

IEA - International Energy Agency

IRENA - International Renewable Energy Agency

Inter-conversion – The process of converting hydrogen into its derivatives (e.g., ammonia, methanol) and vice versa.

Just Energy Transition – A framework ensuring that energy transitions are fair and inclusive, protecting workers and communities.

Life Cycle Assessment (LCA) – The evaluation of environmental impacts associated with all stages of a product's life.

Multilateral Agreements (MAs) – International treaties or agreements involving multiple countries for cooperation on hydrogen and energy policies.

Memorandum of Understanding (MOU) – An agreement between two or more parties expressing convergence of will, indicating an intended common line of action. It is often used either in cases where parties do not imply a legal commitment or in situations where the parties cannot create a legally enforceable agreement.

Net Zero Strategy – A national plan to achieve carbon neutrality by a specific target year.

Paris Climate Accord – An international treaty to limit global warming to well below 2°C, preferably 1.5°C, above pre-industrial levels by the end of the 21st century.

Personal Protective Equipment (PPE) – Safety gear used by workers handling hydrogen and its derivatives.

Renewable Energy – Energy derived from natural sources that replenish over time, such as solar, wind, hydro, and bioenergy.

Renewable Hydrogen – Hydrogen produced from renewable energy sources.

Risk Assessment – The systematic process of evaluating potential risks associated with hydrogen production, storage, and transportation.

Strategic Energy Hub – A designated location for the production, storage, and distribution of hydrogen to ensure energy security.

Sustainable Aviation Fuel (SAF) – Alternative jet fuel derived from renewable sources, including hydrogen-based fuels.

Supply Chain Management – The coordination of processes involved in producing and delivering hydrogen from source to end-user.

Venting – The controlled release of hydrogen gas into the atmosphere to ensure safety during storage or transport.

Annex: List of related policies

The National Policy on Renewable Hydrogen in Sri Lanka supports other related national policies (some of them are listed below) and is intended to be complementary.

National Energy Policy & Strategies of Sri Lanka
https://www.energy.gov.lk/images/resources/downloads/national-energy-policy-2019-en.pdf

National Chemicals Management
Policyhttp://www.env.gov.lk/web/images/downloads/policies/Chemical_Mgt_Policy.pdf

National Policy on Waste Management, Ministry of Environment
https://env.gov.lk/web/images/pdf/policies/National_Policy_on_Waste_Management_English.pdf

National Occupational Health and Safety Policy
https://www.niosh.gov.lk/images/2020/OSH_Policy_2014.pdf

National Environment Policy
http://www.env.gov.lk/web/images/pdf/policies/National_Environment_Policy_-_English.pdf

National Decent Work Policy
https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@asia/@ro-bangkok/@ilo-colombo/documents/publication/wcms_114045.pdf