

Policy-2023 for leasing the government fallow land for green hydrogen production using non-conventional energy sources such as solar, wind, wind solar hybrid energy.

Government of Gujarat

Revenue Department

Resolution No. JAMAN/3923/197/A.1

Sachivalaya, Gandhinagar.

Date: 08-05-2023

Taken into notice:-

- 1). Resolution No. Jaman/3915/924/A.1 dt.25-01-2019 of the Revenue Department, Sachivalaya, Gandhinagar.
- 2). Resolution No. Jaman/3915/924/A.1 dt.29-07-2019 of the Revenue Department, Sachivalaya, Gandhinagar.
- 3). Resolution No. Jaman/3915/924/A.1 dt.14-09-2020 of the Revenue Department, Sachivalaya, Gandhinagar.
- 4). Letter NO.MAPAB-10-2023 (38)-KU DT.08-05-2023 of the Sa.V.Vi.

**Preamble:-**

Collective efforts are needed to mitigate climate change globally. Governments, businesses, international organizations, civil society and other stakeholders need to take specific steps to make the world a resilient, sustainable and low-carbon economy.

As part of its commitment to mitigate the impact of climate change, the Government of India has set India's long-term goals of reaching an zero emission by 2070 as per the Intended Nationally Determined Contribution (INDC). The Government of India is committed to reducing the intensity of carbon emissions in its GDP by 45 per cent by 2030 as compared to 2005. The target is to increase the renewable

energy capacity to 500 GW to meet 50 per cent of the country's energy requirement through renewable energy by 2030.

At present, the National Green Hydrogen Mission has been released by the Government of India. And at the national level, a target has been set to produce about 5 million metric tons of green hydrogen per year by the year 2030.

Internationally also the production capacity of green hydrogen is developing more rapidly. For this, it is necessary to set up green hydrogen production units so that the state of Gujarat is also at the forefront of the production of green hydrogen. It is essential that a huge capacity is established for green hydrogen production in the state. So that the State of Gujarat can maintain its strategic importance at the international level and play an important role in industrial competitiveness.

Globally, a lot of work is being done in the green hydrogen sector. If the state of Gujarat takes initiative in this field, then new employment opportunities will be created in the state as well as small industries and manufacturing units related to the production of green hydrogen will also be encouraged.

The state of Gujarat is the hub of industrial units of various sectors. Keeping in view the target of net zero emission of the Government of India as well as the target of the Government of Gujarat for the same, there is a need to develop the production capacity of green hydrogen in the state. Due to the result-oriented policy of Gujarat and the favourable conditions of investment, it has been decided to make

Gujarat the hub of green hydrogen production in the country, being a favourable state to become a hub of green hydrogen production.

The Government of Gujarat is keen to promote all renewable energy generation projects in all possible ways and circumstances to best utilize the combined potential of this clean energy source. For this purpose, the State Government has implemented a policy regarding allotment of government land for wind, solar, wind solar hybrid parks mentioned in read (1) (2) and (3) taken by the state government.

In order to maintain a balance in the interests of all stakeholders, to encourage more competition and to encourage the participation of the private sector for the production of green hydrogen through renewable energy, the State Government, after careful consideration has therefore developed such renewable energy by the use of such renewable energy. For leasing out non-fertile land, the following objectives are decided to be taken into consideration.

### **Objectives**

- \* The main objective of this policy is to produce green hydrogen. For which renewable energy is a source.
- \* At present, blue, brown, grey hydrogen is in use, which is produced from traditional fossil fuels such as coal, gas, instead the aim is to change the hydrogen production technology and produce green hydrogen from water through electrolyser by using renewable energy such as solar, wind, solar wind highbridge energy.
- \* Green hydrogen can be used as fuel for the purpose of decarbonizing sectors such as shipping and transportation. As

well as in manufacturing industries such as steel and chemicals, it can be an important raw material as well as as a fuel.

- \* To provide the framework for promoting green hydrogen production by the use of renewable energy for making the best and effective use of the land and thus achieving the objective of clean environment.
- \* To promote new technologies, methods and methods for green hydrogen production in a way that can be integrated with any other renewable energy source.

Resolution:-

1). NOUN:-

This policy will be known as the Policy 2023 for leasing out government fallow land for green hydrogen production using non-conventional energy sources such as solar, wind, wind solar hybrid energy.

2). DEFINITION:-

- i). Green hydrogen is the hydrogen produced from electrolyser technology using fully renewable energy (solar, wind, wind solar hybrid energy) as well as green ammonia produced from green hydrogen.
- ii). Control means a person who has the legal authority to dictate operations and policies, directly or indirectly, in relation to a person who is a company or a corporation, who owns more than 50 per cent of such voting shares and in relation to a person who is not a company or corporation. Further, in the case of holding shares indirectly, the intermediary company in the chain of

ownership will also be considered an associate i.e. the chain of control has not been broken. To establish this, the held shares of each such company must be more than 50 per cent.

- iii). The commencement of the project means the commencement of commercial operations of the project on the production of green hydrogen using the energy of plants like Wind, Solar, Wind Solar Hybrid etc. as certified by the Nodal Agency.
- iv). Companies are the establishments established in India under the Companies Act, 2013 as per the Companies Act, 1956 or, as applicable, and if not inconsistent with the reference or meaning given herein, the term i.e. and shall include its successors in the business and its successors in the business.
- vi). CTU or Central Transmission Utility means any Government company notified by the Central Government under sub-section 1 of section 38 of the Electricity Act, 2003.
- vii) The High Powered Committee or HPC means the Committee of the Revenue Department as indicated in resolution no. JAMAN/3915/924/A1, SUB PARA NO. 28 dated 25-01-19.
- viii). The committee of experts is the committee formed by GPCL (Gujarat Power Corporation Limited).
- viii). The nodal agency is GPCL (Gujarat Power Corporation Limited).
- ix). A person means a person, company or registered association or association.
- x). STU or State Transmission Utility means a Government Company specified by the State Government under sub-section 1 of section

39 of the Electricity Act-2003 (Gujarat Energy Transmission Corporation Limited)

xi). A tripartite agreement is an agreement between the Collector, the nodal agency and the applicant setting up solar, wind, wind solar energy plants for the production of green hydrogen as may be decided by the Department of Energy and Petrochemicals in consultation with the Department of Revenue.

3). Duration of the lease period

The lease period of government land for setting up solar, wind, wind-solar hybrid energy plants for green hydrogen production will be 40 years.

4). Appropriate units and its parameters:-

In the State of Gujarat, any person who wants to develop a solar, wind, wind solar hybrid energy plant for the production of green hydrogen for the production of green hydrogen, any unit, company can apply for land for the production of at least 1 lakh metric tonnes per year by the company, the criteria for which will be as follows:

i). A writing undertaking has to be given that the land sought by the applicant will be used only for the production of green hydrogen, to set up solar, wind, wind solar hybrid energy plants and electrolysers and, if necessary, to install an energy storage system.

ii). The applicant will have to submit a preliminary preparation report while applying for the production of green hydrogen.

- iii-a). Applicant should have experience in generating minimum 500 MW solar, wind, wind-solar highbridge renewable power
  - iii-b). The applicant should be a user of brown, grey, blue hydrogen, such as petrochemicals, steel, urea, ammonia, metal, chemical, fertilizer, power etc. and whose annual requirement of green hydrogen should be 1 lakh metric tons or more.
  - iv). The applicant or his associates, for the proposed capacity of solar, wind, wind solar highbridge energy plant for the production of green hydrogen, should have a minimum net worth of Rs 1200 crore per lakh metric tonnes per annum per annum, having an average minimum net worth in the last 3 financial years.
  - v). A committee of experts will examine the preliminary preparedness report submitted by applicant for the production of green hydrogen. Further action will be taken based on the recommendation of the committee.
  - vi). Exemption from the above eligibility criteria will be granted on a case-to-case basis for units under the control of the State Government.
- 5). Functions of the Committee of Experts:-  
Evaluation of applications on Green Hydrogen, pre-feasibility reports and scrutiny and review of applications, expert opinions and technical recommendations.
- 6). Norms for allotment of land on lease:-
- i). The purpose of allocating this land will be to set up solar, wind, wind solar hybrid energy plants for the production of green

hydrogen. If the land is not used for this purpose, the allotted land will have to be returned. Under no circumstances will the application for transfer of government fallow land allotted for this purpose solely for the production of renewable energy or other purposes be entertained.

- ii). An applicant or a person under his control, company, corporation, registered body, association or its affiliates shall not be given more than the land required for the production of 30 lakh metric tonnes per annum of green hydrogen.
- iii). The land has to be reserved keeping in view the present and future requirements of the state government units for the production of green hydrogen. In addition, 1 lakh acres of land has been reserved for the expansion of the existing salt base chemical industry in Kutch.

As a large number of green energy projects need to be set up by state government enterprises to meet the power demand of the coming years an estimated 1 lakh hectares of government land will have to be allotted to state government companies for the development of non-conventional energy sources.

- iv). The HPC will also be able to set the necessary parameters for the matter of equipment, production related to the production of green hydrogen.

Apart from this, preference can be given to the applicants whose annual requirement of green hydrogen is 1 lakh metric tonnes or more.

In addition, the HPC will be able to give priority to the applications received for the production of green hydrogen in respect of the applications received till the date of publication of this resolution regarding the allotment of land.

- v). While selecting the applicant by the High Power Committee (HPC), the recommendation of the Committee of Experts as well as the technical qualifications and financial capacity of the applicant, turnover in the field of hydrogen production and renewables, net worth, production capacity, experience, manufacturing base in Gujarat, capital investment in Gujarat, other work done in the field of hydrogen other than renewables, the government of India, the state government, etc.
  - vi). During the period of the entire project, whether within or outside the land allotted for this project, the need for any kind of infrastructure such as power transport, internal roads, roads, water supply system, communication system, security and security arrangements, etc., will have to be borne by the applicant. The government will not have to bear any kind of expenditure.
- 7). Terms of the lease agreement:-
- i). The annual rent of the land allotted by the government is Rs 15,000 per hectare and other taxes will have to be deposited with the government by the applicant from the date of handing over the possession of the land. Here, from the date of this resolution, an increase of 15 percent in fares will have to be calculated every three years.

- ii). The applicant will have to deposit the annual rent of the land and other taxes applicable in advance. After a period of 90 days from the due date, simple interest will have to be taken at the rate of 12 percent. If the applicant fails to deposit the rent including interest within 24 months, then the rent allotted to him will be filed with the government. All kinds of taxes, license fee, assessment charges or any other charges and GST taxes, including non-agricultural conversion tax, education cess, local funds, etc., will have to be borne by the tenant for renting out government land.
- iii). At the time of handing over the possession, the applicant will have to enter into a tripartite agreement between the collector and the nodal agency. At that time, the applicant will have to keep an amount equal to 1 year rent of the land as a deposit and pay 1% service charge and necessary stamp duty.
- iv). The applicant of solar, wind, wind solar hybrid energy plant for production has approved an interest-free security deposit of Rs 50 crore per lakh metric tonnes per annum with the capacity of generating green hydrogen, which will have to be deposited by the state government's security deposit within a month of the notice of the applicant. For this, the concerned companies will have to deposit a deposit, security deposit in the State Bank at Gandhinagar. The receipt for depositing that amount will have to be authorized by the Withdrawal and Distribution Officer of the Department of Energy and Petrochemicals.

The minimum capacity for partial hydrogen production of more than 1 lakh metric tonnes will be calculated at 10,000 metric tonnes and a maturity deposit will be taken in proportion to it.

The amount of capacity which establishes less capacity than the KPCT allotted to the applicant within the stipulated time, his security deposit of the same capacity will be confiscated and action will be taken to take back the excess land.

- v). The applicant, the land leased out for the production of green hydrogen cannot be sublease (sub-lease) to others.
- vi). For the production of green hydrogen to start quickly, the development of the associated renewable energy plant will have to be completed within 8 years after handing over the possession of the land. Under this, 50% power capacity and green hydrogen generation capacity in the next 3 years and 100% electricity capacity in 3 years and green hydrogen production will have to be started in the next 3 years. The applicant will have to give a written undertaking in this regard to the nodal agency.

The progress of the plant will be reviewed at every stage of development and in case the prescribed progress is not found, the High Power Committee will recommend to the government for appropriate action. If at the end of 8 years the project fails to start generating 100% of the power capacity of the project on the land allotted on lease and thereby the production of green hydrogen, the capacity of the project will be reduced to the actual installed capacity and action will be taken to take back the remaining land by the government.

- vii). In the present case, the existing rules, regulations, instructions of the Department of Energy and Petrochemicals will have to be followed. The benefits under the present policy and the existing industrial policy should not be doubled.
- 8). Functions of the Nodal Agency:-
- 1). Applications regarding the Green Hydrogen Project will have to be accepted. Then to check the suitability of the land and quantity demanded for the purpose of production of green hydrogen.
  - 2). Monitoring and Review of Green Hydrogen Projects
  - 3). Ancillary action relating to the Committee of Experts
  - 4). Work on recovery of other charges on behalf of the State Government in addition to the charges related to the land
  - 5). Other functions assigned by the Government
- 9). Action to be taken in the matter of allotment of land:-
- 1). The nodal agency will set up a land bank by identifying government waste, fallow, non-fertile lands for setting up solar, wind, wind-solar highbridge energy plants for the production of green hydrogen and provide a person interested in the production of green hydrogen to the company.
  - 2). In addition to the nodal agency, any person interested in the production of green hydrogen, the company can self-identify such government waste, fallow, non-fertile land and submit its demand to the nodal agency along with the pre-feasibility report.
  - 3). The nodal agency will conduct preliminary verification of the applicant's application and the technical and financial

qualifications regarding the Hyderabad Pre-Feasibility Report will be verified by a committee of experts.

- 4). A detailed proposal regarding the land demand of the applicant satisfying the qualifications under this policy will have to be sent by the nodal agency to the concerned Collector under the knowledge of the Revenue Department, Government of Gujarat.
- 5). On the proposal made by the nodal agency regarding the demand for land, the concerned District Collector, while examining various aspects, will send a proposal to the Revenue Department with all the details as well as self-evident opinion after examining the other possible uses of the land such as salt industry, shrimp farming, mining etc.
- 6). The revenue department will submit the decision to the high power committee through the department of energy and petrochemicals on proposals received from the collector. The department of energy and petrochemicals will also have to consult the industries and mines departments as and when required.
- 7). The revenue department will take up the process of obtaining the final approval of the government to give the land on lease to the applicant as per the provisions of this resolution after the HPC recommended the selection of the applicant.
- 8). According to the final decision of the government, the collector will have to make detailed orders of allotment of land as per the order made by the revenue department. And at this stage, the Collector will have to enter into an agreement between the

Collector, GPCL and the establishment of solar, wind, wind-solar energy plants for the production of green hydrogen, as per the pattern of the tripartite agreement.

10). Responsibilities of the Applicant for setting up solar, wind, wind solar highbridge energy plants for the production of green hydrogen

The applicant should undertake the following activities to achieve the objective of speedy establishment and implementation of the project, plant in the State.

- i). To plan, finance, develop, operate, manage and maintain the plant.
  - ii). Obtaining scientific and non-scientific permissions and preparing an area development plan within the plant.
  - iii). To prepare necessary infrastructure such as water to transmission system up to CTU/STU sub-station, roads, sewerage system, etc. to facilitate speedy implementation of the project.
  - iv). To include plant related activities such as production, repair and maintenance etc. as per the instructions made by the Government of India and the State Government.
  - v). Development of land and other infrastructure in the first 2 years from the date of lease of land by the applicant and 50% power capacity and generation capacity of green hydrogen in the next 3 years and 100% power capacity in the remaining 3 years and ensure that the production of green hydrogen starts.
- 11). Implementation schedule for the plant:-

The applicant should develop the plant as per the following schedule.

Sr. No.	Project stage	Date
1	Date of handing over possession of the land to the applicant	Zero Date ("Z")
2	Land rent agreement	Z + within 6 months
3	To produce energy at 50% of the allocated capacity.	Z + within 5 months
4	Generating 100% renewable energy and generating green hydrogen	Z + within 8 months

12). Energy Accounting:-

Energy accounting for the electricity generated in the RE unit set up for the production of green hydrogen will be arranged separately by the Department of Energy and Petrochemicals.

No banking facility will be available in the state's power grid on the electricity generated in such a project.

13). Transmission - Infrastructure

It will be the responsibility of the applicant to develop all transmission infrastructure required for solar, wind, wind-solar hybrid energy for the production of green hydrogen. For using the transmission-distribution infrastructure established by the state government, it will be charged at the rate fixed by GERC (Gujarat Energy Regulatory Commission).

14). Interim arrangement of renewable energy:-

- i). The electricity generated in such parks will have to be used only for the purpose of generating green hydrogen in Gujarat. The purchase or sale of electricity generated in this manner will not have to be done under any circumstances. If any additional electricity has been generated during the period when the production of green hydrogen starts and there is a need to sell it, then an appropriate decision will be taken by the Department of Energy and Petrochemicals, Government of Gujarat in this regard keeping in view the power situation at that time.
- 2). The renewable electricity generated in the land to be allotted on the basis of the assessment of the collector and the land to be allotted on the basis of the assessment of the collector will have to be used only in the production of green hydrogen in the state of Gujarat. Gujarat Power Corporation Limited, the nodal agency of the Department of Energy and Petrochemicals, will have to give an assurance in this regard.
- 3). The electricity generated in such projects will be applicable as per the rules of various charges such as transmission charges and losses, open access charges, cross subsidy charges etc. fixed by the Gujarat Electricity Regulation Commission.

15). Charges other than facilitation charges

If someone takes electricity out of the state from the R.E. unit established for the production of green hydrogen. they will have

to pay the facilitation charges and other charges fixed by the state government.

16). Deemed N.A. Benefits :-

The land to be allotted to the applicant will be deemed to have been deemed to have been deemed to be NA for the purpose.

17). Trouble removal power

In case of any difficulty in implementing this policy, the Department of Revenue/Department of Energy and Petrochemicals, Government of Gujarat, is authorized to clarify and interpret the provisions as it deems necessary to remove the difficulty, either automatically or after hearing the parties who have submitted to make changes in any provision.

18). Power to interpret:-

If there is any doubt or dispute as to the meaning, intention and purpose of any provision of this policy, the interpretation made by the Department of Revenue as well as the Department of Energy and Petrochemicals, Government of Gujarat shall be final and binding on all concerned.

This resolution is issued by the Department of Finance vide its note dated 25.04.2023 and dated 24.04.2023 of the Department of Energy and Petrochemicals and with the approval received from the letter dated 08.05.2023 of the competent level.

By order of the Governor of Gujarat and in his name

Sd/- Illegible

(Nilesh Modi)

Deputy Secretary (Land)

Revenue Department

To,

- Principal Secretary of the Hon'ble Governor, Rajbhavan, Gandhinagar.
- Principal Secretary of the Hon'ble Chief Minister, Sachivalaya, Gandhinagar.
- Principal Secretary of the Hon'ble Minister (Revenue), Sachivalaya, Gandhinagar.
- Principal Secretary of the Hon'ble Minister (Energy), Sachivalaya, Gandhinagar.
- Additional Chief Secretary, Department of Finance Secret Secretary, Sachivalaya, Gandhinagar.
- Additional Chief Secretary, Department of Industries and Mines Secret Secretary, Sachivalaya, Gandhinagar.
- Additional Chief Secretary, Secret Secretary, Revenue Department, Sachivalaya, Gandhinagar.
- Principal Secretary, Department of External Affairs, Department of Energy and Petrochemicals, Sachivalaya, Gandhinagar.
- Commissioner, Land Reforms and Secret Secretary, Sachivalaya, Gandhinagar.
- Revenue Investigation Commissioner's Secret Secretary, Sachivalaya, Gandhinagar.
- Finance Advisor (Revenue), Finance Department, Sachivalaya, Gandhinagar..

- Survey Joint Secretary, Deputy Secretary, Revenue Department, Sachivalaya, Gandhinagar.
- A-1, A, G, C and L-Branch Revenue Department, Sachivalaya, Gandhinagar.
- Deputy Section Officer Select File
- Branch Select File.