



**MINISTRY OF PLANNING AND DEVELOPMENT  
OFFICE OF THE PERMANENT SECRETARY**

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Level 14, Eric Williams Financial Building, Independence Square, Port-of-Spain, Trinidad and Tobago, WI  
Tel: 612 9700 ext. 2016/1329

PD: 11/4/117

November 11<sup>th</sup>, 2020

Ms. Rocío Medina Bolívar  
Representative  
Country Office of Trinidad and Tobago  
Inter-American Development Bank  
17 Alexandra Street, St. Clair  
Port of Spain

Dear Ms. Bolívar

**Request for Technical Assistance to Evaluate the Technical and Economic Feasibility of  
Introducing the Production of Green Hydrogen to Trinidad and Tobago**

The National Energy Corporation of Trinidad and Tobago is interested in accessing technical assistance from the Inter-American Development Bank to evaluate the technical and economic feasibility of introducing the production of green hydrogen in Trinidad and Tobago. The attached correspondence from the Ministry of Energy and Energy Industries refers.

This initiative is built on the tenets reflected in Trinidad and Tobago's National Development Strategy (NDS) 2016-2030, Vision 2030 which is geared towards transforming Trinidad and Tobago into an advanced country, sustaining growth and development, and optimizing the quality of life of all citizens. Under Theme V of the NDS: *Placing the Environment at the Centre of Social and Economic Development*, special emphasis is placed on environmental sustainability including the use of renewable energy, energy efficiency and energy conservation.

In this regard, the Government of the Republic of Trinidad and Tobago (GORTT) is requesting the technical support of the Inter-American Development Bank to the National Energy Corporation of Trinidad and Tobago for exploring the viability of introducing the production of green hydrogen to Trinidad and Tobago. Furthermore, given the nature of the request, the GORTT is also

requesting that the Bank execute the Technical Cooperation on its behalf to minimize the risk of delays in implementation.

I look forward to a positive response to this request.

Sincerely

  
Permanent Secretary  
Ministry of Planning and Development

PERMANENT SECRETARY  
MINISTRY OF PLANNING  
AND DEVELOPMENT



**Government of the Republic of Trinidad and Tobago**  
**MINISTRY OF ENERGY AND ENERGY INDUSTRIES**

Head office: Levels 15 & 22-26, International Waterfront, Tower C,  
#1 Wrightson Road, Port-of-Spain.  
Telephone (868) 225-4334 Facsimile (868) 225-5746

**MEMORANDUM**

**EEI: 14/9/1**

**TO:** Permanent Secretary, Ministry of Planning & Development  
Mrs. Joanne Deoraj

**FROM:** Permanent Secretary (Ag.), Ministry of Energy and Energy Industries  
Ms. Penelope Bradshaw-Niles

**DATE :** November 9, 2020

**SUBJECT:** **Technical Assistance- Request for Assistance to Evaluate the Technical and Economic Feasibility of Introducing the Production of Green Hydrogen to Trinidad and Tobago.**

Reference is made to the subject at caption.

The Honourable Minister of Finance in the 2019/2020 National Budget Presentation indicated that the State would seek collaborations with the private sector, academia and international organizations to explore different applications of hydrogen within the local economy.

With this in mind, the National Energy Corporation of Trinidad & Tobago (National Energy) is seeking to engage the Inter-American Development Bank (IDB) for technical assistance to evaluate the technical and economic feasibility of introducing the production of green hydrogen to Trinidad and Tobago. The letter from National Energy is attached at **Appendix I**.

The IDB has indicated that grant funding to support the evaluation has been secured and it is anticipated that teams from both National Energy and the Ministry of Energy and Energy Industries (MEEI) would work together with IDB consultants to execute this study.

The MEEI is seeking the support of the Ministry of Planning and Development as the National Designated Authority for the execution of a technical cooperation agreement with the IDB. A sample letter is attached at **Appendix II** for your onward transmission to the IDB.

Please contact me at [pbradshaw-niles@energy.gov.ti](mailto:pbradshaw-niles@energy.gov.ti) or telephone number 225-4334, ext. 2642, if you have any queries.

Thank you for your consideration.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'H. Bradshaw-Niles', with a stylized flourish at the end.

Permanent Secretary (Ag.)

Ministry of Energy and Energy Industries





Ref. No.:027/National Energy/VP/AM/ma-r

September 9<sup>th</sup>, 2020

Ms. Penelope Bradshaw - Niles  
Permanent Secretary  
Ministry of Energy and Energy Industries  
Levels 15& 22-26, International Waterfront  
Tower C  
Port of Spain

Dear Ms. Bradshaw – Niles,

**Re: Technical Assistance- Request for Assistance to Evaluate the Technical and Economic Feasibility of Introducing the Production of Green Hydrogen to Trinidad and Tobago**

Reference is made to the subject at caption.

The Honourable Minister of Finance in the 2019/2020 National Budget Presentation indicated that the Government of Trinidad and Tobago (GORTT) was desirous of exploring different applications of hydrogen within the local economy and encouraging collaborations with the private sector, academia and international organizations. The private sector heeded the call and have begun work to study the application of grey hydrogen in the first instance, making use of waste heat from the industrial processes to generate power to make hydrogen. The resulting economic disruption from the Covid-19 virus has greatly accelerated the need to advance efforts which could help scale-up technologies such as hydrogen that will set the country on a post-COVID-19 path toward a sustainable energy sector.

Green hydrogen represents another hydrogen technology which can not only decarbonise the sector but also add a significant element of economic sustainability to the local energy sector. Additionally, Trinidad and Tobago has existing natural gas infrastructure and therefore good potential to supplement existing natural gas supplies.

In support of GoRTT's stated position, National Energy Corporation of Trinidad and Tobago Limited (National Energy) is seeking to identify opportunities whereby renewables-based hydrogen could be used in Trinidad and Tobago as a basis for the decarbonization of the existing petrochemical industry as well as hard to decarbonize sectors like the cement and metals industries. Beyond the industrial sector, hydrogen could also provide a possible avenue to transition towards clean mobility as the transportation sector shifts from gasoline and CNG towards electric driving, both with batteries and with fuel cells fueled by hydrogen.

A modular green hydrogen facility is seen as a precursor to the establishment of a green hydrogen economy. The pilot will serve to advance development toward a hydrogen economy along the most effective path.

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National Energy Corporation of Trinidad & Tobago Limited

Cor. Festival and Factory Roads, Brechin Castle, Couva, Trinidad and Tobago P.O. Box 1127 Port of Spain

(t) 868 630 3471 (f) 868 630 2105 [nationalenergy.tt](http://nationalenergy.tt)

DIRECTORS: C. Erid (Chairman), K. Allum, B. Balasubramanian, A. de Faver, H. Datta, B. Fraser, M. Ganesan, W. Hamilton, D. Marlowe, C. Mohammed

(2)

September 9<sup>th</sup>, 2020

Ms. Penelope Bradshaw – Niles - Permanent Secretary  
Ministry of Energy and Energy Industries

**Re: Technical Assistance- Request for Assistance to Evaluate the Technical and Economic Feasibility of  
Introducing the Production of Green Hydrogen to Trinidad and Tobago**

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It is against this background that National Energy has been liaising with the Inter-American Development Bank (IDB) for technical assistance to evaluate the technical and economic feasibility of introducing the production of green hydrogen to Trinidad and Tobago. IDB has secured funding to support the evaluation and it is anticipated that teams from both National Energy and the Ministry of Energy and Energy Industries (MEEI) would provide technical support for this technical co-operation.

National Energy is therefore seeking MEEI's support to request through the Ministry of Planning and Development's (MPD) the execution of technical co-operation with the IDB. A sample letter to be issued from MPD to the IDB's Country Representative to access the funds was provided by IDB and is attached for your reference and forwarding to MPD.

We thank you in advance and look forward to receiving the MEEI's support in securing this funding. Should you have any queries/concerns, please do not hesitate to contact the undersigned.

Yours faithfully,



Dr. Vernon Paltoo  
President

cc: Ms. Marda Maynard – Manager, Investment Facilitation  
Mr. Timmy Baksh-Director, Energy Research and Planning Division, MEEI  
Ms. Anita Hanley-Head, Renewable Energy Division, MEEI  
Mr. Sheldon Bulcher-Director, Downstream Petroleum Management, MEEI

ABCH/b

National Energy Corporation of Trinidad & Tobago Limited

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DIRECTORS C. Eust (Chairman), K. Allen, S. Balissoon, A. de Foa, H. Doolin, S. Fraser, M. Garneau, W. Hamilton, D. Matthews, C. Mohammed



Date

Ms. Rocio Medina Bolivar  
Representative  
Country Office of Trinidad and Tobago  
Inter-American Development Bank  
17 Alexandra Street, St. Clair  
Port of Spain

Dear Ms. Medina Bolivar,

**Technical Assistance – Request for Assistance to Evaluate the Technical and Economic Feasibility of Introducing the Production of Green Hydrogen to Trinidad and Tobago**

I refer to the above captioned subject and the previous correspondence dated \_\_\_\_\_ from the Ministry of Planning and Development and the Ministry of Energy and Energy Industries. As you are aware, the National Energy Corporation (National Energy) is seeking technical assistance from the Inter-American Development Bank (IDB) for the development of technical and economic pre-feasibility and feasibility analyses for the introduction of technologies to produce hydrogen from renewable energy sources (commonly known as green hydrogen), through a consultancy to draft the required analyses.

Furthermore, the Ministry of Energy and Energy Industries requests that the IDB execute the Technical Cooperation (TC) on its behalf. The Ministry of Energy and Energy Industries and the NEC team will provide technical support to the TC execution. The justification for this arrangement is that the execution by the bank will enable the concentration of the management of consultancies, thus minimizing the risk of delay. We look forward to a positive response regarding your support in this critical area.

Sincerely,

Ministry of Planning and Development



Ministerio  
**de Economía  
y Finanzas**

Montevideo, 5 de noviembre de 2020.

Sr. Matías Bendersky  
Banco Interamericano de Desarrollo  
Presente

**Ref.: Solicitud Cooperación Técnica Regional no  
reembolsable para el Ministerio de Industria y Energía.**

De mi mayor consideración:

Tengo el agrado de dirigirme a Ud. en relación al interés manifestado por el Ministerio de Industria y Energía (MIEM), de contar con apoyo financiero del BID, a través de una Cooperación Técnica no Reembolsable.

Uruguay ha sido identificado como un país con alto potencial para la producción y comercialización de hidrógeno verde debido a la alta capacidad de energía renovable instalada, al significativo potencial para nuevas instalaciones de este tipo de energías y a su estabilidad sociopolítica.

El MIEM propone la realización de una serie de estudios que permitan avanzar con el análisis de factibilidad de las distintas alternativas de producción de hidrógeno, del potencial de los distintos mercados de exportación, aspectos logísticos, análisis de riesgo y seguridad de las instalaciones entre otros estudios.

Le informamos la no objeción de este Ministerio a la propuesta de asistencia referida y agradecemos se nos mantenga informados sobre los avances de la cooperación técnica.

Sin otro particular, saluda a Ud. muy atentamente,

Azucena Arbeleche  
Ministro de Economía y Finanzas  
República Oriental del Uruguay





**Ministerio  
de Industria,  
Energía y Minería**

Montevideo, 24 de setiembre de 2020

Lic. Azucena Arbeleche  
Ministra de Economía y Finanzas

**Presente**

Ref. Solicitud de Cooperación Técnica para el Ministerio de  
Industria, Energía y Minería (MIEM)

De mi mayor consideración:

El hidrógeno verde es producido en base a fuentes de energía renovables y no emite gases de efecto invernadero durante su consumo. Éste puede ser utilizado como materia prima, combustible, almacenamiento o portador de energía y se presenta como un vector energético para alcanzar los objetivos y compromisos del Acuerdo de París. El Foro Económico Mundial (FEM), la Agencia Internacional de Energías Renovables (IRENA), la Agencia Internacional de la Energía (AIE) y la Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) y los gobiernos del Japón (que ha declarado su intención de consumir hasta 300.000 toneladas anuales para 2030), Australia y Alemania presentan al hidrógeno como un energético fundamental para la reducción rápida, sostenida y rentable de las emisiones de gases de efecto invernadero. El desarrollo de la producción de hidrógeno verde a gran escala podría apoyar tanto la reducción de las emisiones en las industrias difíciles de electrificar como el desarrollo de un nuevo producto de exportación que aproveche las ventajas competitivas locales.

Uruguay ha sido identificado de forma preliminar como un país con alto potencial para la producción y comercialización de hidrógeno verde (obtenido mediante hidrólisis de agua utilizando energías renovables) debido a la alta capacidad de energía renovable instalada, al significativo potencial para nuevas instalaciones de este tipo de energías y a su estabilidad sociopolítica.

Adicionalmente, un equipo multidisciplinario y conformado por personal de la Administración Nacional de Combustibles, Alcohol, y Portland (ANCAP), la administración Nacional de Usinas y Transmisiones del Eléctricas (UTE) y el Ministerio de Industria, Energía y Minería (MIEM) han iniciado la conceptualización de un proyecto piloto para la generación de hidrógeno verde con uso como energético en una flota de 10 vehículos de larga distancia a celdas de hidrógeno. Además, el MIEM ha firmado un Memorando de Entendimiento con países interesados en evaluar el potencial de producción y exportación de hidrógeno desde Uruguay al resto mundo.



**Ministerio  
de Industria,  
Energía y Minería**

El MIEM, responsable de establecer las políticas energéticas del país, propone la realización de una serie de estudios que permitan avanzar con el análisis de factibilidad de las distintas alternativas de producción de hidrógeno, del potencial de los distintos mercados de exportación, aspectos logísticos, análisis de riesgo y seguridad de las instalaciones entre otros estudios.

Por lo expuesto, nos dirigimos a Usted, con el fin de remitirle el pedido de aprobación para solicitar ser incluidos como beneficiarios de la Cooperación Técnica Regional RG-T3777 no reembolsable, a ser ejecutada por el Banco Interamericano de Desarrollo, por un monto máximo de hasta US\$ 364.000 que será compartido entre los beneficiarios de la Cooperación Técnica, lo que permitirá dar continuidad a esta iniciativa.

Sin otro particular y agradeciendo desde ya la atención que pueda brindar a la presente solicitud, le saluda atentamente,

Ing. Omar Paganini

**Ministro de Industria, Energía y Minería**