

# Matchmaking registration form Green Hydrogen in Uruguay



Institution or company name	TECNICAS REUNIDAS S.A.				
Institution webpage	www.tecnicasreunidas.es				
Other web sites of interest					
Contact (person, email,	Mr. Ricardo Sanchez Galindo				
phone)	s.galindo.r@tecnicasreunidas.es				
	Phone: +34 158 11 10				
Additional contact	Mr. Juan Carlos Bayon				
(person, email, phone)	jcbayon@tecnicasreunidas.es				
	Phone: +34 158 88 02				
<b>Type of institution</b> (please select all that apply)	Public	x	Private	Academy	
	TR is a Public company listed in the Spanish Stock Market				

#### Short description of your institution/company:

Técnicas Reunidas is a company specialized in the design and management of the execution of industrial plant projects throughout the world, with almost 60 years of experience. Técnicas Reunidas has designed and managed the construction of more than 1,000 industrial plants in over 50 countries. Its clients include many of the major national and multinational oil companies.

TR has incorporated the most advanced systems and technologies based on the latest generation of data processing tools to manage and design the projects. More than 8,000 professionals have been trained and posess the practical experience necessary to manage these projects.

TR applies the procedures established in its Quality and Environmental System in all the projects, certified according to ISO 9001 / 14001 and considers HSE as not only a requirement but a vital part of every project.

Your institution provides	products	services	Х
(please select all that apply)			

# Short description of your relevant market, i.e. your relevant product/service and geographic market:

Full range of services

TR can offer a full range of services, from engineering to support services and management.

- **PMC Project Management Consultant.** Support to customers in the project direction and in the coordination of the different interfaces to bring down the costs and to finish the execution of the project as a whole.
- **Feasibility Studies.** Feasibility studies and technical and financial consulting work, from the conceptual analysis of the opportunity to the necessary definition to pin down the project financing.
- **Basic Engineering.** Basic Engineering of both own processes and units not licensed thanks to the know-how acquired and developed over more than 50 years by a process department formed by more than 200 professionals.
- FEED Front End Engineering and Design. Detailed analysis of a project in which, from the Basic Engineering of the licensed units and Open-Art, the main processes are defined, the technologies are selected, and the service needs of the plant are identified. The aim is to optimise the goals set by the customer.
- **OBE Open Book Estimate.** A process that is carried out from a FEED and in which the customer and the engineering work jointly and transparently in defining the total costs of a project. The process usually becomes a turnkey EPC scheme.
- **Detail Engineering.** Detail Engineering, contemplating all the disciplines of an industrial project.
- **Project Management, Planning and Control.** Direction, management, planning and control of projects, with teams specialised in such work.
- **Procurement.** Management of purchases, inspection, activation, traffic and supply, in a department devoted exclusively to supplying equipment and materials under optimal conditions of price, term and quality, from anywhere in the world.
- **Construction, Assembly and Commissioning.** Management of construction and assembly, and assistance in commissioning and start-up, frequently

including the training of personnel of the facilities by TR and/or personnel specialised in the construction activities.

- Quality, Environment and Safety Management. Quality, Environment and Safety Management, with specialists in the Técnicas Reunidas group who apply the experience achieved in multiple projects in countries with different safety cultures.
- **Collaboration in financial structures.** Active collaboration with our customers for the development of financial structures for the execution of their projects.
- **Research and Development.** Research and Development through the Group Division where technological processes have been developed that are applied commercially in the industrial field, some of them indisputable leaders in the world market.

#### SCOPE OF SERVICES

TR Group's capacity and experience in the integration of these services allows it to undertake the projects within the expected time, budget and quality, and thus become a company highly specialised in integrated management and in the performance of turnkey projects with a large technological component.

TR has experience executing works of different scopes, according to the needs of the customer:

- Conceptual analysis of opportunities, pre-feasibility and feasibility studies.
- Front End Engineering and Design (FEED)
- Open Book Estimate (OBE)
- Engineering and Procurement (EP)
- Engineering, Procurement and Construction (EPC)
- Engineering, Procurement and Construction and Commissioning (EPCC)
- Engineering, Procurement and Construction Management (EPCM)
- Project Management Consultancy (PMC)

TR capacity to offer an integral service to TR clients, coupled with a resolute commitment to in-house research and development of technologies, defines TR's "added value" as an engineering and construction firm in the international market.

#### **BUSINESS AREAS**

Apart from being engaged in the development of advanced technologies and ownership of patents for various industrial processes; in particular for fertilizers and non-ferrous metal recovery, TR is active in Oil & Gas, both for the upstream and downstream, Petrochemical, Energy and Industrial Infrastructure business sectors.

## Refining

TR is a world engineering benchmark in the design and construction of refineries. TR has designed and built more than 400 refining units worldwide for several of the world's leading energy companies. Its experience in oil processing ranges from complete new refineries to modernizations and expansions of existing refining facilities, for several of the main international energy companies.

The units designed and built include basic refining, desulphurization, deep conversion and octane improvement units.

TR is one of the leading companies in the world in this sector in terms of its number of references, knowledge and the current projects in which it participates.

## Petrochemical

TR has gained extensive experience in petrochemicals, chemicals and fertilizers through the design and construction of approximately 100 processing units and plants throughout the world. TR has constructed processing units that produce monomers and various kinds of polymers and plastics, and chemical plants and units that produce fertilizers such as diammonium phosphate (DAP), monoammonium phosphate (MAP), nitrogen-phosphate-potassium (NPK) and nitric acid, among others.

In nitric acid, TR has proprietary technologies, which have been and remains today of successful application in new industrial processes. This experience also includes the knowledge of a wide spectrum of technologies used in the production of olefins, aromatics, raw materials for detergents and others. TR's experience in this area also includes know-how regarding a wide spectrum of technologies used in the production of olefins, aromatics, raw materials for detergents and others.

# Development of Oil & Gas Fields Oil & Gas Processing Plants

TR has contributed to building two of the largest gas fractionation facilities in the world.

TR, through its Upstream and Natural Gas Division, offers its customers an integrated solution that covers everything from engineering for the development of oil and gas fields, to turnkey projects for complex installations in remote locations, ranging from the production of crude oil and gas, passing through primary treatments, treatment and fractionation plants, compression and pumping stations, to hydrocarbon transport systems.

The great experience acquired over the years in this field make the TR Group a driving force in the strategic development of this activity, guaranteeing the customer a product tailor-made in terms of quality, deadline and price. In this field, TR has the ability, proven through its references, to carry out feasibility studies and prepare basic engineering, to turnkey projects including operation and maintenance. It has all the latest technological tools to optimize its services for the benefit of our customers.

# NG Liquefaction, LNG Storage & Regasification

The execution of LNG projects is one of TR's main business lines. Activities in this field began in 1967 and TR has contributed greatly since then to developing natural gas infrastructure particularly in Spain, but also in Latin America, China and North Africa.

These projects are particularly complex from the point of view of safety, which is a factor that conditions all their phases. TR has an excellent reputation in this respect, not having had any safety eventuality in all plants designed and built.

Pipeline transport, Storage parks and Compression stations

More than 60% of the Spanish Oil and Gas Pipelines network has been designed by TR. Since 1965, TR has developed pipe transportation projects for oil and gas and has built all kinds of related facilities.

## Power generation

Over 45 GW of installed power in more than 25 countries.

Since the 1970s TR has been developing power generation projects, with total installed power exceeding 45 GW in more than 25 countries. About 17 GW have been executed as turnkey projects (EPC).

The engineering capacity and knowledge of the most advanced technologies allow TR to meet the needs of customers from different sectors, and to optimize the solutions in each case.

## Water

Since its foundation, TR has installed water treatment plants of various technologies in more than 30 countries. TR's Energy and Water Division has great capacity to design, build and operate all kinds of water treatment plants: drinking water units, urban and industrial waste water and desalination plants.

## Area(s) of activity (please select all that apply) in connection with Green H2

Logistic		Industrial	X	Finance			
Legal							
Expertise areas (ple	Expertise areas (please select all that apply)						
R&D	X	Technology transfer	X	Technology developer	Х		
Technology end-user	X	Technology supplier	X	Investor			
Other:							

## Main technological capacities and facilities

Propietary Technologies

In an increasingly complex and volatile economic environment, in which markets and competition are global, TR maintains a firm commitment to the development of innovative technologies and knowledge generation as the principal drivers and guarantors of success in the medium and long term. At the technological level, the company's strategy focuses on the development of new technologies, the consolidation of existing technologies and the diversification into new sectors and applications.

As a result, Técnicas Reunidas via its subsidiary company ESPINDESA and its Proprietary Technologies Development Division (DDTP) has a series of industrial plants, operating under their technologies.

Likewise, the development of discreet processes by the Heat Transfer Division and the Processes Department has served to consolidate Técnicas Reunidas position with basic engineering as one of its key products.

## About the partner(s) you are looking for

Where are you looking for a partner (please select all that apply):					
In Uruguay	Х	Abroad			
Looking for partners in the area(s) (please select all that apply)					
Hydrogen and other products production	X	Renewable Energy	X	Transport	

Logistic	Industrial		Finance		
Legal					
What kind of partner(s) are you looking for					
TR is general main contractors for the construction of industrial installations, we are					
looking for a Local partner that will provide assistance and support related to local					
issues, for examples construction activities, local content and regulations (taxes,					
law.).					

Which capacities and/or facilities are you looking for

Date: