	RESEARCH AND DEVELOPMENT	HYDROGEN REFUELING STATION	POWDER PRODUCTION	MIXER ASSEMBLY
1. LOCATION SPECIFICATIONS What are the context and challenges of the project?	This site will serve as the headquarters of H2 Power in the country, possibly Europe, and develop the design of hydrogen stations using blenders, and the industrialization of the production of aluminum powder, all to European standards and with European suppliers.	The demo site would consist of installing the H2 power equipment which will mix water and aluminium powder to produce 1,600kg of hydrogen per day onsite, and all the necessary components to a fully commercial hydrogen refueling stations. This site will be used for process improvements, testing, and demonstration purposes for prospective customers, suppliers, and partners. The goal is to make this site also commercially operational.	H2 Power provides several production sites for its aluminium and etain powder with an annual capacity of 70,000 t to start. This site will be used for process improvements, testing, and demonstration purposes for suppliers and partners.	H2 Power plans a single assembly plant for its blenders in Europe. It will serve the European market as a whole.
Budget (estimated)	€ 6,000,000	€ 10,000,000	€ 104,000,000	€ 19,000,000
General environment For the location of your future site, do you want to: • A specific industrial environment, if so which one?	Proximity to metallurgical and organic analysis laboratories, and schools training potential employees.	The site should be close to H2 Power other facilities, with all the requirements necessary to be commercially viable.	Many aluminum users ready to deliver their waste to us	aluminum production; low energy prices; local network of potential subcontractors
Other specific criteria:	Close to the first demonstration sites, station and powder production. Site in campaign is certainly preferable for our researchers, and privacy.		The proximity of roads is important for trucks transporting raw materials and aluminum powder Site in the countryside is certainly preferable to avoid noise, and possible vapors.	The proximity of motorways is important, especially if it is connected to the European network and to England. The proximity of a hydrogen station equipped by H2 Power and in operation is a necessity because this site could become a test site for H2 Power.
For the location of your future site, do you want to:			A weakly urbanized environment	A weakly urbanized environment
Do you need proximity • Motorway • Rail freight • TGV station • Sea / river port • Multimodal platform	Yes Yes	Yes	Yes	Yes Yes Yes Yes optional
Other comments:			Easy access by road for heavy trucks	Easy access by road for heavy trucks with trailers the size of a 40-foot container.

	RESEARCH AND DEVELOPMENT	HYDROGEN REFUELING STATION	POWDER PRODUCTION	MIXER ASSEMBLY
2. LOCATION SPECIFICATIONS, Human resources and employment				
What is the estimate of the number of employees of your site:				
• At startup	19	3	114	27
• 3 years after opening	Will depend on commercial development.	5	342	100
At startup and at 3 years, what distribution between:				
• Manual workers / Production operators		2	90 / 270	14 / 55
• Logistics operators	1		8 / 20	2 / 12
• Administrative employees	5		6 / 20	3 / 8
• Middle management / Team leaders	4	1	7 / 25	5 / 18
• Executives / Engineers	9		3 / 7	3 / 7
Do you have specific skills needs?	Skills required for team leaders and laboratory technicians in the following areas: aluminium recycling; automatisms; methods of manufacture from aluminium; aluminum packaging; development of equipment; experience plans; digital modeling; experimentation assembly; industrialization of processes; manufacturing environment; gas environment (preferably hydrogen).	Experience in gas station operations.		Skills for production industrial equipment: Maintenance, welders, machinists, assemblers, roboticist, electrician, quality control / safety
Do you consider specific work schedules:				
• Staggered hours	No	No	Yes	Yes
• 7/7	No	No	Yes	Yes
• Night shift	No	No	Yes	Yes
Do you have any specific training needs:	To be determined	To be determined.	Maybe; not yet determined.	Perhaps; not yet determined.
Other specific needs:		To be determined.		Normal hours at first. Other considerations: 2 production teams could be used to absorb an increase in production volume.

	RESEARCH AND DEVELOPMENT	HYDROGEN REFUELING STATION	POWDER PRODUCTION	MIXER ASSEMBLY
3. LOCATION SPECIFICATIONS, Characteristics of the land and the building				
On what date do you want your site to be operational (building built and process installed)?	As possible because this site will also serve as a headquarters, and be used to prepare the demon sites.	Once the first mixer is built by the R&D center.	By the end of 2022, or beginning of 2023	At the latest: at the receipt of the first sales order.
What are you looking for:	Land for the construction of an existing building or building		Land to build a building or use an existing building	Land to build a building or use an existing building
THE LAND Describe the land you are looking for (area and shape / buildable height / special characteristics and functional characteristics):	The land should be large enough to: - A parking large enough to accommodate employees, visitors, subcontractors. - Storage for materials before processing; materials after treatment; finished products; final waste - A security enclosure to prevent intrusions - A workshop for maintenance services.	About 4 hectares with parking for large trucks and cars, equipment, and facilities (store).	The land should be large enough to: - Accommodate several trucks simultaneously, with dedicated parking for at least 3 trucks - the areas needed: materials before treatment; materials after treatment; finished products; final waste - A security enclosure to prevent intrusions	The land should be large enough to: - Accommodate several trucks simultaneously, with dedicated parking for at least 3 trucks - parking for employees - Host an area to test mixers outdoors. - Hold an inventory of aluminum powder for testing - A security enclosure to prevent intrusions
INDUSTRIAL OR LOGISTICS BUILDING For the building you are looking for or plan to build (industrial or logistics building):				
• Total surface area • Height of the building	Start with 1,500 to 3,000 m²	4 hectares		20 to 30,000 m² About 9m, 1 or 2 overhead cranes of 20t throughout the production area for the movement of mixers and raw materials. Suction otes for areas dedicated to welding (steel, and possibly aluminum)
• Surface areas, per use:	Should be large enough to have in separate areas: a mini powder production line, a mixer to test hydrogen, alumina, and mechanisms, a digital department, an automation department, an analysis laboratory, a mechanical workshop for the maintenance department, and many individual offices for researchers and their teams, general services, and executives.	To be determined	To be defined; Preferably, 2 or more loading docks for receiving goods, and 2 or more loading docks for shipping powder.	To be defined; Preferably, 2 or more loading docks for receiving goods, and 2 or more loading docks for shipping blenders (with a large area available for storage of ready-to-ship mixers)
• Will your site require one compressed air network (per point or peripheral loopback)?	Yes	To be determined	Could be finalized in a specific study. Yes	Could be finalized in a specific study. Yes

	RESEARCH AND DEVELOPMENT	HYDROGEN REFUELING STATION	POWDER PRODUCTION	MIXER ASSEMBLY
• Will your site require firefighting equipment (sprinkler network, water body, RIA...)?	Yes	To be determined	Yes	Yes
· Do you want extension possibilities?	Yes	To be determined	Yes	Yes
· If so, for what area?	Yes; to be defined according to commercial development.		Triple initial surface area	Double initial surface area
· For the production and logistics parts, what is the necessary ground resistance?				A full 40 feet container
· Do you need outdoor storage?	Yes		Yes	Yes
· If so, from what surface?	to be determined		to be determined	to be determined
· How many loading and unloading docks do you want?				2+/2+
Estimation of the need for handling equipment?				2 to 4
Estimated need for overhead cranes (number, load expressed in tonnes, height under hook):				1 to 2
THE OFFICE BUILDING				
For the office building you are looking for or planning to build:				
• What total surface area in m²	to be determined			
o Breakdown of office space:				
§ Partitioned:	to be determined		125 m², 5 people	100 m², 5 people
§ Open space:	to be determined		200 m², 20 to 30 people	100 m², 3 to 10 people
• Meeting room need:	Yes		Yes	Yes
• Reception desk needed:	Yes		Yes	Yes
• Laboratory requirements:	to be determined		Yes, for quality control	Yes, for quality control