

Project YaREN: Fact vs. fiction

Project YaREN is a proposed blue ammonia production facility located at Enbridge Ingleside Energy Center (IEEC). There is an abundance of misinformation surrounding the project.

Let's explore the facts.

Fiction: Ammonia plants are unsafe, and this project will jeopardize the safety of everyone near it.

Fact: Ammonia production is one of the safest and most efficient industries in the world.

- Ammonia is the second most manufactured chemical globally, and one of the two project partners, Yara, is one of the most experienced ammonia producers in the world with an excellent safety record and extensive knowledge of the production process.
- From the earliest stages, Project YaREN will go through an intensive and thorough design analysis focused on keeping people safe by assessing and reducing potential risks.
- Project YaREN will not involve ammonium nitrate, a solid fertilizer that has been linked with explosions and large-scale industrial accidents. There will be no ammonium nitrate onsite with YaREN.

Fiction: Ammonia plants are new and unproven technology. Ingleside is a guinea pig for experimental technology.

Fact: Ammonia has been manufactured for over 100 years.

- Nothing in the design of this facility is experimental.
- The design of Project YaREN will be based on Yara's 100 years of experience producing ammonia.
- Since 1956, the American Institute of Chemical Engineers (AIChE) has held an annual symposium on ammonia synthesis technology – with an emphasis on continual progress in ammonia plant safety. Engineers from around the world gather to share knowledge and best practices to advance safety in the industry. For the last decade, Yara has been a leading contributor as a member of the steering committee.

Fiction: This project is the first of its kind in the United States.

Fact: The U.S. is a leader in ammonia production, only behind China and Russia.

- Ammonia was first produced in the U.S. by DuPont in 1926. As of 2021, there were 32 ammonia production facilities in 17 states.
- What is new about Project YaREN is the integration of carbon capture and sequestration (CCS) into the facility design, giving it the designation of "blue" ammonia.
- The traditional ammonia production process releases CO₂ into the atmosphere, but Project YaREN will capture the CO₂, reducing the amount of greenhouse gases associated with the production.

Fiction: Enbridge doesn't respect the environment, including trees and seagrass.

Fact: Enbridge, the JV partner with Yara, maintains robust environmental and community programs.

- Every place Enbridge works is ecologically important. We invest in programs to promote environmental stewardship and conservation and work closely with local communities to promote shared environmental values and priorities.
- Each of our businesses implements an environmental protection program (EPP) to ensure regulatory and permit compliance and to anticipate, prevent, manage, and mitigate environmental risk, and this includes our joint venture with Yara.
- The engineering and technical services teams that will support Project YaREN and all of our other assets integrate biodiversity considerations into project design, construction, maintenance, and operation.
- We invest in conservation and research projects focused on biodiversity, like the Friends of RGV Reef carbon sequestration study, which was launched in South Texas in 2022.
- Locally, Enbridge supports the Coastal Bend Bays and Estuaries program focused on improving water quality in the area through public education and outreach initiatives.
- We also partner with Texas A&M Corpus Christi student athletes and employees for beach cleanups, and we support the Conservation Wrangler program for Texan by Nature, which is an accelerator for conservation projects.

Fiction: The project is not forthcoming about its water requirements and a recent permit application for water usage is actually for the ammonia facility.

Fact: Enbridge Ingleside Energy Center (EIEC) is a multi-use facility. Each of the businesses is required to operate separately, which includes separate permitting. A recent water permit application is unrelated to Project YaREN.

- In July 2021, EIEC applied for a water use permit with the Texas Commission on Environmental Quality (TCEQ) allowing for the diversion of 500 acre-feet of water/year. The water will be used for routine testing of the fire suppression system associated with Enbridge's existing crude oil storage and marine terminal.
- This permit is not associated with Project YaREN.
- Currently, the project team is reviewing multiple options for sourcing water for Project YaREN.

Fiction: Enbridge ignores air quality standards and doesn't monitor its emissions.

Fact: We monitor air quality at the EIEC facilities and work with regulators to meet or exceed requirements.

- EIEC has been awarded a compliance history rating of HIGH, the best classification available under Texas's compliance history evaluation system.
- Enbridge conducts all monitoring required by its permits, which are written to ensure that all significant potential emissions are tracked and known to TCEQ and reported at least semi-annually in reports made available to the public.

Fiction: The project will generate no local jobs, and there will be no economic benefit to the community.

Fact: Project YaREN will generate roughly 4,000 jobs at the peak of construction and up to 100 permanent jobs once operational.

- The project will utilize jobs across many different disciplines throughout the various stages of construction.
- During plant operations, industrial services will be needed to support operations, maintenance, and material supplies throughout the lifespan of the facility.
- When possible, the project will do its best to source contractors and workers locally and leverage local services and supply chains both during construction and once the facility is operational.

Fiction: Carbon capture and sequestration (CCS) is unproven and uneconomical.

Fact: CCS technology has been used safely in North America for 50 years.

- Thousands of miles of CO₂ pipelines already connect industrial facilities to infrastructure where CO₂ is either permanently stored deep underground or re-used by other industries.
- CCS is a viable way to reduce greenhouse gas emissions from industries that are important to maintaining our way of life.
- The International Energy Agency (IEA) concludes it would be "virtually impossible" to meet global goals for greenhouse gas reductions without increasing the use of CCS.
- CCS can move us toward a more sustainable future.

Fiction: Project YaREN is producing blue hydrogen and blue ammonia for export, neither of which are clean energy sources.

Fact: Project YaREN will be producing blue ammonia — not blue hydrogen — and the blue ammonia production process eliminates 95% of the CO₂ generated during the ammonia production process.

- Unlike most traditional fuels, ammonia is a carbon-free molecule: it emits no carbon dioxide, soot, or sulfur oxide when it is burned. As a result, ammonia as a cleaner fuel for marine transportation and power generation is under development and expected to grow.
- The "blue" ammonia production process removes 95% of the CO₂ from the ammonia manufacturing process, creating a nearly carbon-free fuel.