NORTH AMERICAN H2 NEWS BRIEF



北米水素業界ニュース概要

JUNE 12 - JULY 4. 2025

SEP's Curated H2 News, Insights, and Policy Updates for JETRO & JH2F Members

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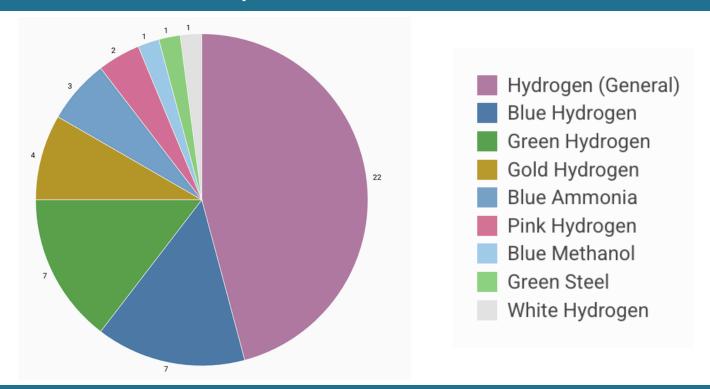
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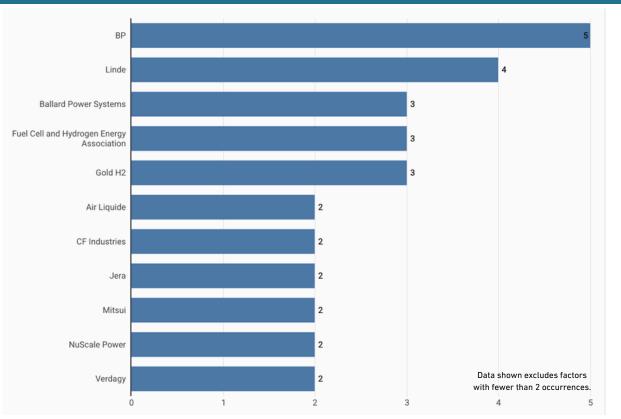


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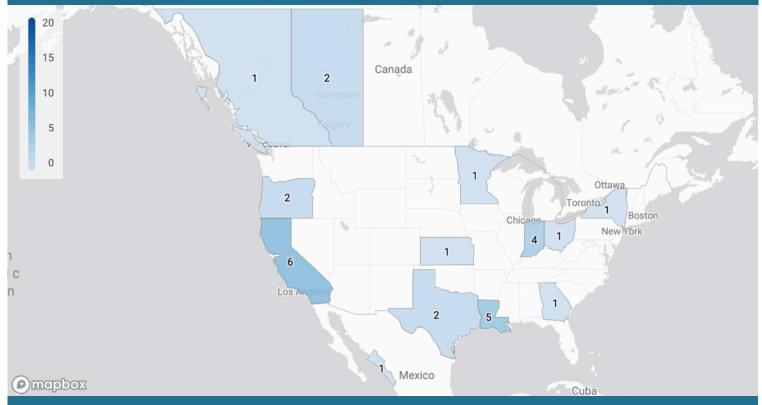
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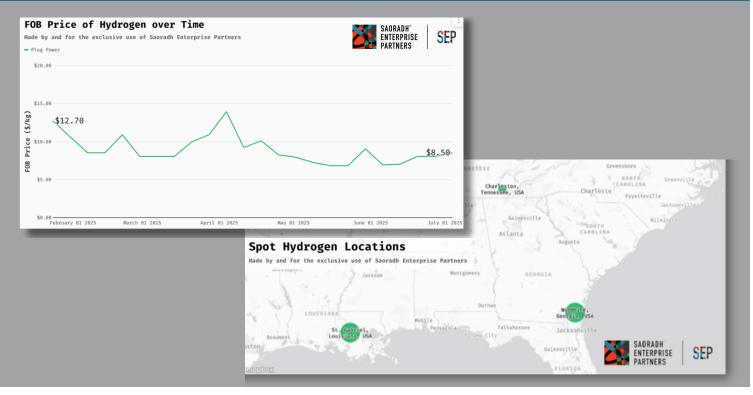


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SEP Analyst Notes / SEPアナリスト解説

Analyst Note (June 12 - July 4, 2025)

June and early July 2025 marked a turbulent yet significant period for the North American hydrogen sector—particularly concerning the future of key U.S. hydrogen and clean energy tax credits. Most notably, hope appeared to be lost for the 45V clean hydrogen production tax credit in mid-June after the U.S. Senate Finance Committee accepted the House's proposal to cut the credit. However, in a dramatic event on the evening of June 28th, Senate Republicans issued a last-minute amendment to the "Big Beautiful Bill," adjusting the 45V commence-construction deadline to January 1, 2028.

After the House of Representatives formally accepted the Senate's revisions, the U.S. hydrogen industry was handed a major policy win: On July 4th, President Donald Trump signed the "Big, Beautiful Bill" into law, bringing long-awaited clarity and renewed momentum to federal clean hydrogen policy.

While last month's analyst note emphasized the importance of a united front—over 250 companies, trade associations, labor unions, and hydrogen hubs standing together to defend the U.S. hydrogen industry—this hard-fought victory would not have been possible without the support of key champions in the Senate who fought to preserve the credit:

- Jim Justice (R-West Virginia)
- Bill Cassidy (R-Louisiana)
- John Cornyn (R-Texas)
- Shelley Moore Capito (R-West Virginia)
- Dan Sullivan (R-Alaska)
- Lisa Murkowski (R-Alaska)
- John Kennedy (R-Louisiana)
- Dave McCormick (R-Pennsylvania.)

The 45V extension date is neither too short nor arbitrary; as Saoradh Enterprise Partners Managing Partner Paul Nelson explains below, its timing aligns with a broader strategic policy calculus:

"This extension date was not chosen at random as it would allow the 120th Congress to be seated in 2027 following mid-term elections and that Congress may be more amenable to clean energy incentives. As such, the typical year-end tax-extenders process by the House Ways and Means Committee in 2027 could take up the matter of extending the 45V deadline. This has occurred for wind, solar, and alternative fuels tax credits in the past and could happen for hydrogen tax credits in the future. However, much work will need to occur in the meantime to position development of clean hydrogen production (and uses) as a relatively bi-partisan issue to ensure inclusion in the tax-extenders package in 2027. This process could also be leveraged for expiring features of other IRA incentives that relate to hydrogen such as carbon capture, energy storage, clean transportation fuels, and sustainable aviation fuels.



Another perspective, voiced by others in the clean energy industry and supported by SEP, is the 45V extension through 2027 could push many clean hydrogen production projects (including electrolysis, pyrolysis and SMR + CCS pathways) that are in the planning or FID stages to move forward. Two and a half years is enough time to get these projects into construction to meet domestic off-take and export opportunities and provide proof-points for a future extension of 45V. The latter including contract-for-difference programs in Germany, Japan and elsewhere that include billions of dollars of funding to bridge willing pricing for production and consumption.

With the US DOE awarded Hydrogen Hubs preparing phase two submittals for projects, this extension of 45V (along with enhancements for 45Q and near-term eligibility for other IRA hydrogen-complementary tax credits) will be available to allow the projects to stay within their necessary economic parameters."

In parallel with the political developments in Washington D.C., a number of major project announcements and technical milestones continued to generate tailwinds across the North American hydrogen sector.

- Georgia Power & Mitsubishi Power: The world's largest hydrogen co-firing demonstration was completed at Georgia Power's McDonough-Atkinson plant. A Mitsubishi M501GAC gas turbine successfully tested blends of up to 50% hydrogen by volume, generating 283 MW of power—setting a new global benchmark for hydrogen-natural gas turbine co-firing.
- Linde's \$400 Million Commitment in Louisiana: Linde announced it will invest \$400 million to build, own, and operate an Air Separation Unit (ASU) to supply oxygen and nitrogen to the Blue Point blue ammonia plant being developed by Mitsui & Co., JERA, and CF Industries. The plant is expected to produce 1.4 million tons of blue ammonia per year, and this ASU will play a critical role in supporting the facility's core processes.
- Hyundai's Green Steel Play: Hyundai Motor Company revealed plans to develop a \$6 billion hydrogen-based green steel plant in Louisiana. The move reflects both a vertical integration strategy and a large vote of confidence in the U.S. hydrogen economy.

While the landscape is beginning to stabilize, a particularly high-profile setback came in mid-June:

 BP Cancels Whiting Refinery Hydrogen Project: BP officially terminated its flagship hydrogen project at the Whiting Refinery in Indiana, which had been positioned as a cornerstone of the MachH2 Hydrogen Hub. The company cited a "lack of certainty for long-term federal government support for low carbon hydrogen" as the key reason behind the decision.

While not quite matching the scale of the announcements listed above, the North American hydrogen market continued to advance in several promising frontier areas—specifically geologic hydrogen exploration, direct water splitting, and hydrogen production using nuclear heat. These developing pathways represent important long-term diversification strategies for clean hydrogen Supply.



Geologic Hydrogen

- HyTerra announced plans to expand its operations, which will now include a third well in Kansas, named McCoy 1, scheduled to spud in early July.
- Gold H2, a Houston-based startup, completed the world's first trial of subsurface bio-stimulated hydrogen production in California's San Joaquin Basin, demonstrating microbial stimulation as a pathway to generate naturally occurring hydrogen.

Photoelectrochemical Water Splitting:

 Iowa-based SunHydrogen, in partnership with the University of Texas, is deploying a 30 square meter proof-of-concept system to produce renewable hydrogen using proprietary photoelectrochemical (PEC) technology, converting sunlight and water into clean hydrogen.

Hydrogen from Nuclear Heat:

 NuScale Power Corp., a leading small modular reactor (SMR) developer whose stock has risen over 150% in the past 12 months, is exploring the use of its excess thermal output for hydrogen production via high-temperature electrolysis.

Despite months of political turbulence and mounting uncertainty, the North American hydrogen industry now finds itself with renewed momentum and clarity. The preservation of the 45V tax credit through at least 2027 provides the clarity and stability needed to unlock project financing, accelerate FIDs, and advance real-world deployment. Coupled with high-impact announcements from industry leaders and continued innovation across emerging production pathways, the sector now has a window of opportunity to turn policy wins into on-the-ground progress. While challenges remain, this moment offers something that's been in short supply: stability.

アナリストノート(2025年6月12日~7月4日)

2025年6月および7月初旬は、北米の水素産業、特に米国の主要水素・クリーンエネルギー税額 控除の今後にとって、激動かつ重要な時期となりました。

最も注目すべきは、6月中旬に米国上院歳入委員会が下院の提案を受け入れたため、45Vクリーン水素製造税額控除への希望が失われたかに見えたことです。しかし、6月28日夜の劇的な展開で、上院共和党は「大きく美しい1つの法案(One Big Beautiful Bill)」に対する土壇場での修正案を提出し、45V着工期限を2028年1月1日に調整しました。

下院が上院の修正案を正式に承認した後、米国の水素産業は政策面で大きな勝利を手にしました。7月4日、ドナルド・トランプ大統領が「One Big Beautiful Bill」に署名し、法律として発効されました。これにより長らく待たれていた連邦政府のクリーン水素政策に明確化と新たな勢いがもたらされました。

先月のアナリストノートでは、250を超える企業、業界団体、労働組合、水素ハブが団結して 米国の水素産業を守るという統一戦線の重要性を強調しましたが、この苦労して勝ち取った勝



利は、控除の維持のために尽力した主要な上院議員たちの支援なくしては実現しなかったでしょう。

- ジム・ジャスティス議員 (共和党・ウェストバージニア州)
- ビル・キャシディ議員 (共和党・ルイジアナ州)
- ジョン・コーニン議員 (共和党・テキサス州)
- シェリー・ムーア・キャピト議員 (共和党・ウェストバージニア州)
- ダン・サリバン議員 (共和党・アラスカ州)
- リサ・マカウスキー議員(共和党・アラスカ州)
- ジョン・ケネディ議員 (共和党・ルイジアナ州)
- デイブ・マコーミック議員 (共和党・ペンシルベニア州)

45V税額控除の延長日が短すぎるわけでも、恣意的というわけでもありません。サオラド・エンタープライズ・パートナーズ (SEP) のポール・ネルソンマネージングパートナーが以下で説明するように、そのタ イミングはより広範な戦略的政策計算と一致しています。

「この延長日は無作為に選ばれたわけではありません。これにより、中間選挙後の2027年に第120回議会が招集され、その議会がクリーンエネルギーのインセンティブにより前向きになる可能性を考慮しています。そのため、2027年には下院歳入委員会が行う典型的な年末の税額控除延長プロセスにおいて、45Vの期限延長が取り上げられる可能性があります。これは過去に風力、太陽光、代替燃料の税額控除で行われており、将来的に水素の税額控除でも行われる可能性があります。しかしながら、2027年の税額控除延長パッケージに含まれることを確実にするためには、その間にクリーン水素の製造(および利用)の開発を比較的超党派的な問題として位置づけるために多くの作業が必要となるでしょう。このプロセスは、炭素回収、エネルギー貯蔵、クリーン輸送燃料、持続可能な航空燃料など、水素に関連する他のIRA優遇措置の期限切れ機能にも活用できます。

クリーンエネルギー業界の関係者から表明され、SEPも支持する別の見解としては、2027年末までの45V着工期限延長により、計画段階または最終投資決定(FID)段階にある多くのクリーン水素製造プロジェクト(電気分解、熱分解、SMR + CCSを含む)が前進する可能性があるということです。2年半という期間は、これらのプロジェクトを建設段階に進め、国内のオフテイクおよび輸出の機会に対応し、将来の45V期限延長のための実証例を提供するのに十分な時間です。後者には、ドイツ、日本、その他の国々で実施されている差額契約(CFP)プログラムが含まれ、生産と消費の希望価格を橋渡しするために数十億ドル規模の資金が投入されています。



米国エネルギー省が水素ハブに授与したプロジェクトがフェーズ2の提出準備を進める中、 この45Vの延長(および45Qの強化、その他のIRA水素補完税額控除の短期的な適用資格)は、 プロジェクトが必要な経済的パラメーター内に留まることを可能にするでしょう。」

ワシントンD.C.での政治的展開と並行して、多くの主要なプロジェクト発表や技術的なマイルストーンが北米の水素分野全体に追い風を生み出し続けました。

- ジョージア・パワー & 三菱パワー
 - ジョージア・パワーのマクドノフ・アトキンソン発電所で、世界最大規模の水素混焼実証試験が 完了しました。三菱M501GACガスタービンは、最大50%の体積比での水素混焼を成功させ、 283MWの電力量を達成しました。これは、水素-天然ガスタービンの混焼における新たな世界基準を設定するものです。リンデ社、ルイジアナ州における4億ドルの投資 リンデ社は、三井産、 JERA、CF インダストリーズが開発するブルーポイント・ブルーアンモニアプラントに酸素と窒素を供給するための空気分離装置(ASU)を建設、所有、運営するために、4億ドルを投資すると発表しました。このプラントは年間140万トンのブルーアンモニアを生産する予定で、 このASUは施設の主要プロセスを支える上で重要な役割を果たすことになります。
- ヒュンダイ(現代自動車)のグリーンスチール戦略 現代自動車は、ルイジアナ州に60億ドル規模の水素ベースのグリーンスチール工場を建設する計画を発表しました。この動きは、垂直統合戦略と、米国の水素経済への大きな信頼の両方を反映しています。

情勢は安定し始めているものの、6月中旬には特に注目を集める後退もありました。

● BP、ホワイティング製油所の水素プロジェクトを中止 BPは、インディアナ州のホワイティング製油所における主力水素プロジェクトを正式に中止しま した。このプロジェクトは、中西部水素ハブ(MachH2)の要と位置づけられていました。同社 は、決定の主要な理由として「低炭素水素に対する連邦政府の長期的な支援の不確実性」を挙げ ています。

上記の発表規模には及ばないものの、北米の水素市場は、地質学的水素探査、直接水分解、原子力熱を利用した水素製造といういくつかの有望なフロンティア分野で進展を続けました。これらの開発中の道筋は、クリーンな水素供給にとって重要な長期的な多様化戦略を意味します。



• 地中水素

- ◆ ハイテラ社は、事業拡大計画を発表し、7月上旬に掘削開始予定のカンザス 州にある3番目の油井McCov 1が含まれています。
- ◆ ヒューストンに拠点を置くスタートアップ企業Gold H2は、カリフォルニア州サンホアキン盆地で世界初の地下生物刺激による水素生産試験を完了し、微生物刺激が自然発生水素を生成する経路となることを実証しました。

● 光電気化学的水分解

◆ アイオワ州を拠点とするサンハイドロゲン社は、テキサス大学との提携により、 独自開発の光電気化学 (PEC) 技術を用いて太陽光と水から再生可能な水素を 製造する30平方メートルの概念実証システムを導入しています。

● 原発余剰熱を利用した水素製造

◆ 過去12ヶ月間で株価が150%以上上昇した大手小型モジュール炉(SMR)開発企業のニュースケール・パワー社は、高温電気分解による水素製造のために余剰熱出力の利用を検討しています。

数ヶ月にわたる政治的混乱と不確実性の高まりにもかかわらず、北米の水素産業は今、新たな勢いと明確な方向性を見出そうとしています。45V税額控除が少なくとも2027年末まで維持されることで、プロジェクトファイナンスの確保、最終投資決定(FID)を加速させ、実社会への導入を促進するために必要な透明性と安定性を提供します。業界リーダーによる影響力の大きい発表や、新たな生産経路全体での継続的なイノベーションと相まって、水素産業には今、政策的勝利を現場での進歩につなげる絶好の機会を得ています。課題は残っていますが、この瞬間はこれまで不足していたもの、つまり安定性をもたらしてくれています。



News Stories / 主要ニュース一覧

Policies / 政策

June 12 - July 4, 2025

7/03/2025 - Statement on the passage of the One Big Beautiful Act on behalf of Frank Wolak, President & CEO of the Fuel Cell and Hydrogen Energy Association 2025年7月3日

「One Big Beautiful Act」可決に関する燃料電池・水素エネルギー協会フランク・ウォラック会長兼CEOの声明

"As Congress passes the One Big Beautiful Bill Act, FCHEA is proud to have played a central role in helping restore the critical Section 45V hydrogen production tax credit. We commend our incredible Senate champions – particularly Senators Shelly Moore Capito and Bill Cassidy – for recognizing hydrogen's unique potential to create jobs, drive investment, and strengthen our nation's energy security. By restoring this incentive and providing the U.S. hydrogen industry with the flexibility it needs to invest and grow, Congress has sent a clear signal that the United States is serious about competing in the global clean energy economy. "Extending the commencement of construction date to January 2028 for the hydrogen production credit gives the industry an opportunity to advance a significant round of projects that will jump start the U.S. hydrogen market, including the crucial Regional Hydrogen Hubs. "The extension reflects the efforts of FCHEA and the coordination of organizations from multiple energy sectors who came together to support a reasonable, commonsense policy solution. The U.S. hydrogen sector is now positioned to leverage this opportunity and advance American energy and manufacturing leadership." Full Story

7/03/2025 - 45V hydrogen tax credit cutoff in 2028 as Trump budget clears Congress 2025年7月3日

45V水素税額控除、2028年に期限設定 トランプ予算案が議会通過

House Republicans have passed President Donald Trump's budget bill, after a 24-hour debate, paving the way for it to be signed into law on Friday (4 July). This version, which passed the Senate on Tuesday (1 July), will see 45V's expiry date pulled back from 2033 to 2028 – offering two additional years of eligibility compared to the original termination proposal of 31 December 2025. Many hydrogen proponents have praised the concession as a win, given that the bill will slash \$488bn in green energy spending over 10 years as part of the Trump administration's effort to roll back Biden-era incentives. **Full Story**



Policies / 政策

June 12 - July 4, 2025

7/01/2025 - US Senate agrees two-year reprieve for 45V clean hydrogen tax credits as part of 'One Big Beautiful Bill'

2025年7月1日

米国上院、「大きく美しい1つの法案」の一環で45Vクリーン水素税額控除を2年間猶予することで合意 The US Senate has agreed to give a two-year reprieve to the 45V clean hydrogen production tax credits as part of the so-called One Big Beautiful Bill Act that it passed this afternoon following an all-night session. The version of the bill passed by the House of Representatives last month included a complete termination of the up-to-\$3/kg subsidy for any projects that started construction after the end of this year. But the Senate version of the bill sets the deadline to 1 January 2028, giving developers another two years to begin construction in order to qualify. Full Story

7/01/2025 - US government 'did not adequately plan, resource, or develop controls' for \$8bn hydrogen hubs programme: auditor 2025年7月1日

米国政府80億ドルの水素ハブプログラム、監査で「不十分な計画、資源、管理体制の整備」を指摘 The US government's Office of Clean Energy Demonstrations (OCED) faces criticism over its handling of the \$8bn Regional Clean Hydrogen Hubs (H2Hubs) programme in a recently published audit by the Department of Energy's Office of Inspector General, after a review that started back in May 2024. "We found that the OCED did not adequately plan, resource, or develop controls to help ensure the H2Hubs Program met its goals and objectives," the Office of Inspector General wrote in its report. The Office of Inspector General raised the example of the guidance for claiming the 45V clean hydrogen production tax credit as an element that would impact the entire programme — and would therefore have benefited from a higher level of risk assessment. Full Story

6/30/2025 - US Senate Extends 45V Clean Hydrogen Tax Credit Deadline 2025年 6 月30日

米国上院、45Vクリーン水素税額控除税の期限を延長

In an unexpected development, the US Senate has revised the Trump administration's contentious budget bill to extend the eligibility window for the 45V hydrogen production tax credits. The updated draft from the Senate Budget Committee pushes the construction start deadline from January 1, 2026, to December 31, 2027, granting developers two additional years to qualify for the incentive, which offers up to \$3 per kilogram. Previously, versions passed by the House of Representatives and circulated by the Senate Finance Committee aimed to sunset these credits significantly earlier, setting a January 2026 cut-off. This new adjustment could revive numerous hydrogen projects that faced cancellation under the original tighter timeline. The revision emerged during Senate deliberations on President Donald Trump's hallmark legislation, the One Big Beautiful Bill Act. Initially, developers had until the end of 2025 to initiate projects to benefit from these lucrative tax credits. The new extension until January 2028 offers a significant boost, potentially stabilizing investment and planning within the hydrogen sector. Full Story



Policies / 政策

June 12 - July 4, 2025

6/20/2025 - The seven US regional hydrogen hubs issue joint plea to Senate to save 45V tax credit

2025年6月20日

米国7つの地域水素ハブ、上院に45V税額控除の維持を求める共同嘆願書を提出

The seven US regional hydrogen hubs selected by the Biden administration to receive grants totalling \$7bn have issued a joint letter to Senate leaders calling for them to "preserve and strengthen" the 45V clean hydrogen production tax credit that is on the chopping block. The US House of Representatives has already voted to scrap the 2022 Inflation Reduction Act credit, which would provide producers with up to \$3 per kilo of clean hydrogen, and the US Senate's influential finance committee last week also proposed to ditch the federal subsidy in its draft version of the upcoming budget reconciliation bill. But the seven hydrogen hubs — which have only received a small part of their grants so far and might not receive any more from the Trump administration — argue that the 45V credit is "essential to the success of our Hubs and to securing America's energy future". "Our projects are positioned to deliver on America's forecast of energy independence by producing clean hydrogen at scale, creating tens of thousands of high-quality jobs, revitalizing domestic manufacturing, and leveraging America's vast energy resources," the letter states. Full Story

6/20/2025 - US Senate budget bill increases 45Q tax credit for blue hydrogen projects that use captured CO_2 for enhanced oil recovery 2025年6月20日

米国上院予算案、CO₂を強化原油回収に利用するブルー水素プロジェクトの45Q税額控除を増額 The US Senate finance committee budget bill published last week includes a clause that increases the size of the tax credit that blue hydrogen projects would receive when using captured CO2 for enhanced oil recovery (EOR), Hydrogen Insight has learned. The original 2022 Inflation Reduction Act stated in Section 45Q that projects capturing and storing "carbon oxide" in "secure geological storage" would receive a base credit rate of \$17 per tonne stored and a bonus credit rate of \$85 per metric tonne. And the corresponding rates for carbon dioxide that is utilised — including for EOR, in which CO2 is injected into declining oil wells to push remaining crude oil to the surface — were set at \$12 per tonne as the base credit rate, with a bonus rate of \$60 per tonne (ie, 22% less). The new Senate finance committee bill — which also scraps the 45V clean hydrogen production tax credit and renewable energy tax credits — removes the distinction between EOR and non-EOR projects, thereby increasing the EOR rates to match those of "secure geological storage." Full Story

6/17/2025 - US Senate committee pushes ahead with hydrogen tax credit cut in draft budget bill

2025年6月17日

米国上院委員会、予算案草案で水素税額控除の削減を推進

A US Senate committee has opted to retain proposed cuts to the Section 45V hydrogen production tax credit and other clean energy incentives in its draft budget bill. The Senate



Policies / 政策

June 12 - July 4, 2025

Finance Committee released its draft legislative text of the so-called "One Big, Beautiful Bill" on Monday (16 June) as part of the Senate's version of the budget reconciliation. As included in the version passed by the House of Representatives last month, the draft retains a clause to terminate the Section 45V clean hydrogen production tax credit from the 2022 Inflation Reduction Act. Full Story

Projects / プロジェクト

June 12 - July 4, 2025

7/01/2025 - NEXTCHEM Awarded €210M Contract for Ultra-Low Carbon Methanol 2025年7月1日

NEXTCHEM社、超低炭素メタノールプロジェクトで2億1,000万ユーロの契約を獲得 MAIRE (MAIRE.MI) announces that NEXTCHEM has been awarded about €210 million basic engineering and critical proprietary equipment supply contract for the Pacifico Mexinol project. This ultra-low carbon methanol production facility will be located in Sinaloa, Mexico, and will have a capacity of 2.1 million tons per year, out of which around 15% eligible under the ISCC-EU[1] RFNBO criteria for green fuels. The agreement has been signed by NEXTCHEM's subsidiary KT Tech with Samsung E&A Co., Ltd. as the EPC contractor for the project. The Pacifico Mexinol project, worth over USD 3.3 billion, is being jointly developed by Texas-based Transition Industries and the International Finance Corporation (IFC), part of the World Bank, and will be executed by a consortium composed of third parties. Full Story

6/27/2025 - Hyundai's \$6B Bet on Hydrogen Steel Shakes Up U.S. Industrial Decarbonization

2025年6月27日

ヒュンダイ、60億ドルを投じて水素鉄鋼に参入、米国産業の脱炭素化を推進

Hyundai Motor Company is making a bold move in the U.S. — and this time, it's not about cars. The South Korean giant unveiled a sweeping \$6 billion plan to build a hydrogen-powered DRI-EAF steel mill in Ascension Parish, Louisiana. The goal? To kickstart an American hydrogen revolution from the ground up, starting in the heart of heavy industry. Hyundai isn't just aiming to clean up how steel is made — though that's a huge part of the picture. This project is a strategic bet to start building a real hydrogen economy right here in the U.S. It all starts with the steel plant: by making hydrogen central to the industrial process, Hyundai hopes to create a ripple effect across Louisiana's heavy industries. The idea is to generate solid demand first, then use that momentum to scale up hydrogen infrastructure and rollout a full-blown, state-wide hydrogen network. Full Story



Projects / プロジェクト

June 12 - July 4, 2025

6/27/2025 - Caterpillar trials 100% hydrogen in CHP system in Minnesota 2025年 6 月27日

キャタピラー社、ミネソタ州で100%水素の熱電併給(CHP)システムを試験 Caterpillar has trialled a gas combined heat and power (CHP) system using 100% hydrogen, supplying a Minnesota utility system. The US Department of Energy-backed trial saw the 2MW Cat G3516 generator set use both 100% hydrogen and 100% natural gas for up to 200 hours on each fuel type. It was conducted with Minnesota utility District Energy St Paul to assess the technology's impact on local air quality and its reliability in real-world operating conditions. Full Story

6/27/2025 - HyTerra Advances Natural Hydrogen Strategy with Third Exploration Well 2025年 6 月27日

ハイテラ社、3本目の探鉱井で天然水素戦略を推進

HyTerra has confirmed the addition of a third well, McCoy 1, to its 2025 drilling schedule in Kansas, marking a strategic departure from its earlier "twinning" approach toward a more data-driven exploration model. McCoy 1 will be drilled approximately 9 km east of the Sue Duroche 3 well on the Nemaha Ridge, a geological structure that has emerged as central to HyTerra's exploration campaign. The well is scheduled to spud in early July following a planned maintenance period and crew break for the Murfin Rig 116. HyTerra's second well, Blythe 13-20, was completed on schedule and without incident. It reached a total depth of 5,300 feet (1,615 metres) and yielded positive real-time mud gas log readings for both hydrogen and helium across multiple intervals. Full Story

6/25/2025 - Gold H2 Delivers First Successful Subsurface Bio-Stimulated Hydrogen Production Field Trial

2025年6月25日

Gold H2社、地下でのバイオ刺激による水素製造の初のフィールドトライアルに成功 Gold H2, a climate tech energy company, today announced the successful completion of the world's first field trial demonstrating subsurface bio-stimulated hydrogen production. Conducted in a legacy oilfield in California's San Joaquin Basin, the trial represents a landmark advancement in the energy transition, one that leverages microbiology and existing infrastructure to produce clean hydrogen directly from the subsurface. The project marks the first-of-a-kind application of Gold H2's proprietary biotechnology, which harnesses microbiology, depleted oil reservoirs, and existing infrastructure to generate hydrogen in situ, eliminating the need for new drilling, electrolysis, or energy-intensive surface facilities. ChampionX LLC, a global leader in highly engineered technologies that help companies drill for and produce oil and gas safely, efficiently, and sustainably around the world, served as the oilfield services provider, playing a critical role in the efficient deployment and field validation of this breakthrough process. Full Story



Projects / プロジェクト

June 12 - July 4, 2025

6/23/2025 - Linde Signs Long-Term Agreement to Supply Industrial Gases to World-Scale Low-Carbon Ammonia Facility in Louisiana 2025年 6 月23日

リンデ社、ルイジアナ州にある世界規模の低炭素アンモニア施設への産業用ガス供給で長期契約を締結 Linde (Nasdaq: LIN) today announced it has signed a new long-term agreement with Blue Point Number One, a joint venture between CF Industries, JERA and Mitsui & Co. Under the terms of the agreement, Linde will supply industrial gases to Blue Point's 1.4 million metric tons low-carbon ammonia plant in Ascension Parish, Louisiana. Linde will build, own and operate a world-scale air separation unit (ASU) to supply oxygen and nitrogen to the Blue Point project, expected to be one of the largest low-carbon ammonia projects in the world. Linde will invest more than \$400 million in the new on-site plant, which is expected to start up in 2029. Full Story

6/17/2025 - World's largest hydrogen co-firing power plant demo completed in the US 2025年6月17日

世界最大の水素混焼発電所の実証実験が米国で完了

US electricity company Georgia Power and Japanese multinational Mitsubishi have completed the world's largest trial to co-fire hydrogen with natural gas in a turbine at an existing power plant. The two companies tested a blend of up to 50% H2 by volume in a M501GAC natural gas turbine, with an output of 283MW, at Georgia Power's Plant McDonough-Atkinson in the city of Smyrna in the US state of Georgia. Back in 2023, South Korea's Hanwha Impact had claimed the previous record for the largest hydrogen co-firing demonstration project with an 80MW unit, although this had been powered by a near-60% blend of H2.

Full Story

Mobility/Transportation / モビリティ / 輸送

June 12 - July 4, 2025

6/27/2025 - Edmonton Deploys Canada's First Mobile Hydrogen Fuelling Station to Accelerate Fleet Decarbonization

2025年6月27日

エドモントン市、カナダ初の移動式水素ステーションを導入、車両の脱炭素化を加速 The City of Edmonton rolled a new mobile hydrogen fueling station. Built by Azolla Hydrogen Ltd., this innovative system, known as the Azolla Biodrome, now sits at the city's Ellerslie Fleet and Facility Services site. What makes it a big deal? The Biodrome creates hydrogen right on-site using methanol and water, stores it as compressed gas, and can keep up with the daily fueling needs of up to 10 buses or 45 vehicles. That's a serious leap forward for hydrogen infrastructure across the country. Full Story



Technology/Research / 技術/研究

June 12 - July 4, 2025

7/01/2025 - NuScale SMR Simulator Integrates Hydrogen Production, Pushing Nuclear into Green Hydrogen

2025年7月1日

NuScale SMR シミュレーター、水素製造機能を統合、原子力によるグリーン水素推進 NuScale Power, teaming up with GSE Solutions, just pulled off something huge—they've rolled out the world's first fully integrated hydrogen production simulation inside a Small Modular Reactor (SMR) control room simulator. It's all happening at their headquarters in Corvallis, Oregon, where this new setup offers real-time testing of hydrogen production systems that can crank out over 200 metric tons a day using high-temperature steam electrolysis powered by nuclear heat. This isn't just another lab experiment. It's the first time an entire SMR-based hydrogen production process has been modeled at full scale using cutting-edge simulation tools like GSE's JTopmeret® and JLogic. What sets this system apart is its use of Reversible Solid Oxide Fuel Cells (RSOFCs), which not only add another layer of flexibility but also allow for the simultaneous production of electricity, clean water, and hydrogen. That's a powerful trio when you're talking about serious issues like industrial decarbonization and growing concerns around water scarcity. Full Story

7/01/2025 - Hydrogen Workforce Development Sparks in Ohio With \$3M UToledo-Led Initiative

2025年7月1日

オハイオ州、300万ドルのトレド大学主導の取り組みにより水素産業関連人材の育成が加速 The University of Toledo is taking the lead in getting northwest Ohio ready for the shift toward a hydrogen economy. On June 26, 2025, the university hosted the first of two in-person gatherings aimed at tackling some big questions around workforce training, program development, and how to build a solid talent pipeline for hydrogen production, hydrogen storage, and the growing use of zero-emission technology. This effort is fueled by a \$3 million boost in federal funding from the U.S. Department of Energy. The initiative is a true team effort, with key partners including Case Western Reserve University, Owens Community College, Lorain County Community College, the Workforce Intelligence Network, and the Ohio Aerospace Institute. Full Story

7/01/2025 - ProtonH2 looks to pair hydrogen-from-oil well tech with GenH2's cryogenic systems

2025年7月1日

ProtonH2社、油井からの水素製造技術をGenH2社の低温システムとの組み合わせに期待 Canadian start-up ProtonH2, which wants to pull low-carbon hydrogen out of old oil wells, has partnered with US liquefaction player GenH2 to scale local production and delivery of liquid hydrogen. The two have signed a memorandum of understanding (MoU) via GenH2's parent company, Philomaxcap, to explore combining ProtonH2's hydrogen extraction tech with GenH2's cryogenic liquefaction and storage systems. ProtonH2 claims it can produce low-carbon hydrogen for less than \$1/kg through its process, which injects oxygen into depleted oil wells to generate high-concentration hydrogen syngas. Full Story

Technology/Research / 技術/研究

June 12 - July 4, 2025

6/24/2025 - SunHydrogen to install solar-to-hydrogen pilot system with UT Austin 2025年 6 月24日

SunHydrogen社、テキサス大学オースティン校と太陽光水素製造パイロットシステムを設置 SunHydrogen is to partner with The University of Texas at Austin's Centre for Electromechanics (UT-CEM) to install, commission, and operate a proof-of-concept hydrogen production system, covering more than 30 square metres, at UT-CEM's Hydrogen ProtoHub research facility. SunHydrogen is developing a breakthrough technology to produce renewable hydrogen using sunlight and water, utilising proprietary photoelectrochemical (PEC) hydrogen production technology. The company recently announced the execution of a contract with The Process Group (TPG Engineers) for the front-end engineering design of the pilot plant, which will feature sixteen 1.92 square metre photoelectrochemical (PEC) reactor units, each of them the same basic unit to be showcased at the Hydrogen Technology Expo in Houston - totaling more than 30m2 of active area. Full Story

Investments, Mergers, Acquisitions / 投資、合併、買

June 12 - July 4, 2025

7/01/25 - Air Liquide plans to Invest \$200M to Expand ASU and Pipeline Infrastructure in Louisiana Industrial Corridor

2025年7月1日

エア・リキード社、ルイジアナ州工業地帯の空気分離装置(ASU)やパイプラインなどのインフラ拡張に2億ドルを投資予定

Air Liquide is ramping up its presence in the heart of the Gulf Coast's industrial corridor with plans to invest up to \$200 million in Louisiana. The goal? To modernize a key Air Separation Unit (ASU) and stretch its pipeline network an extra 30 miles through the Mississippi River corridor. This move backs a renewed supply agreement with Dow and is all about delivering critical gases—like oxygen and nitrogen—even more efficiently to customers in one of America's biggest manufacturing hubs. Full Story

6/30/25 - Plug Power soars as Senate bill includes surprise extension of clean hydrogen tax credits

2025年6月30日

プラグパワー社株、上院法案にクリーン水素税額控除の予想外の延長が盛り込まれたことで急伸 Plug Power (NASDAQ:PLUG) +26.3% to a three-month high in Monday's trading after the U.S. Senate's latest rewrite of the big tax and spending bill included an unexpected extension for the 45V clean hydrogen production tax credits to year-end 2027, two years longer than the bill's



Investments, Mergers, Acquisitions / 投資、合併、買

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previous version. The move sought by Senator Shelley Moore Capito potentially hands a lifeline to many clean hydrogen projects that had been on the chopping block under the previous January 1, 2026 deadline to be able to claim the credit of as much as \$3/kg. Among other potentially relevant stocks: Bloom Energy (BE) +9.2%, Ballard Power Systems (BLDP) +8.2%, FuelCell Energy (FCEL) +1.3%; other companies working on clean hydrogen production as part of their operations include Air Products (APD), Air Liquide (OTCPK:AIQUF) (OTCPK:AIQUY), BP (BP) and Linde (LIN). Full Story

