Case Study: Oregon's Hydrogen Public Notice Bill (SB 685)

Background and Context

The hydrogen blending controversy in Oregon first surfaced in West Eugene, where strong community outcry successfully halted a utility's blending project. NW Natural, Oregon's largest natural gas company, sought to begin blending hydrogen into residential pipelines in 2022. Soon after, residents in Southeast Portland discovered that NW Natural had begun blending hydrogen into their home gas pipelines without any public notification.

The Challenge

SB 685 was a very basic bill — simply requiring public notice — yet it became a heavier lift than expected. As the *Oregon Capital Chronicle* reported, NW Natural pushed back hard, warning that requiring notice could slow down projects and "cost our customers additional time and money" to clean energy adoption. Industry and labor argued they were already under pressure to adopt clean energy and should not face new "barriers." Members of both parties accepted this framing.

Safety, Climate, and Oversight Debate

There was sharp division among constituents over safety concerns. Labor and industry claimed there was no proof of safety risks, while community members and scientists emphasized that hydrogen blending had not been adequately studied in the Oregon context. Advocates raised particular concerns about aging pipes in residential systems, noting that utilities are only responsible up to the property line. Beyond that point, pipe quality varies widely, especially in older homes. Blending hydrogen into such systems could disproportionately endanger vulnerable residents, including grandparents, children, and those living in low-income housing. Hydrogen's explosiveness and potential to worsen indoor air pollution added urgency to the call for oversight.

Climate impacts were brought into sharp focus by an expert memorandum from Dr. Arjun Makhijani of the Institute for Energy and Environmental Research and senior fellow for Just Solutions. Key findings included:

- Pyrolytic hydrogen, utilized by NW Natural, derived from methane requires about twice as much natural gas as hydrogen production from conventional steam methane reforming.
- Given current leak rates, each kilogram of hydrogen produced by pyrolysis results in roughly 11 kg CO_2-equivalent emissions — nearly three times the DOE's "clean hydrogen" standard.
- Pyrolytic hydrogen offers no real climate benefit compared to burning fossil gas directly, unless methane leaks are radically reduced.
- Hydrogen leaks 3.8 to 4.6 times more than methane and can embrittle steel and degrade polyethylene pipes, compounding safety risks.
- Mixing hydrogen into pipelines at 5% yields negligible climate benefits, and at 20% yields only marginal improvement even if using green hydrogen.

The coalition of neighbors and advocates such as Climate Solutions, Sightline Institute and the Pipeline Safety Trust also engaged the Oregon Public Utility Commission (PUC), which, like most state commissions, has been slow to develop specific oversight and tends to follow federal guidance. Federal oversight itself is slow to adapt to emerging hydrogen technology, leaving significant regulatory gaps.

Original Proposal and Four-Amendment Compromise

The original SB 685 sought to require PUC pre-approval for any blending at any amount. Over four amendments — driven in part by the Senate Energy & Environment Chair and intense industry pushback — the bill was narrowed to the following enrolled provisions:

- Applies only to blending into residential systems.
- Requires utilities to notify customers and the PUC at least 60 days before first blending hydrogen above 2.5% by volume.
- Notice must include the reason for the increase, required siting or permitting approvals, a description of public outreach, and any other information requested by the PUC.
- Requires utilities to maintain public information about their hydrogen blending program on their websites.
- Establishes that, if no notice has been given by June 30, 2030, utilities must provide notice at any blending amount.
- Allows notice to be provided in the same format customers receive billing statements.

Legislative Journey and Timeline

The bill had no fiscal impact, so it moved through both Senate and House policy committees. Even after the compromise, and with opposition shifting to neutral, opponents continued to speak negatively about the bill. This skepticism carried into the House, where Republicans locked down against the bill in committee. Given the nearly balanced committee makeup, every Democratic vote was needed to advance it to the floor.

Session Timeline:

December
Pre-session filed; 12/2 attended community forum with SE Portland residents.

January
Chief sponsors include Senator Golden; additional sponsors signed on. 1/17 bill assigned to Senate Energy & Environment Committee; one-pager released. 1/30 first coalition meeting with NW Natural, UA Local 209, Renewable Hydrogen Alliance, Climate Solutions, Pipeline Safety Trust, and SE Portland residents.

February
2/7 -1 Amendment introduced, removing PUC pre-approval requirement. 2/10 and 2/12 public hearings; Senator Pham testifies. 2/11 *Portland Business Journal* covers opposition. 2/12 *OPB* reports on NW Natural pushback.

March

3/19 action alert sent to community.

April

4/9 -4 Amendment adopted; bill passes Senate Energy & Environment 4-1. 4/14 *Energy Mix* article highlights lack of notice. 4/22 Senate floor passage 20-9; first reading in House; 4/24 referred to House Climate, Energy and Environment

May

5/6 House public hearing with Renewable Hydrogen Alliance testimony; 5/14 Climate Solutions testifies in support. 5/22 passes the House committee 6-4-1.

June

6/3 House floor passage 32-22; 6/5 Senate President signs; 6/9 House Speaker signs. 6/12 Governor signs.

Impact and Significance

SB 685 is now the strongest hydrogen blending transparency law in the nation and serves as a national model for public notice policy. It ensures Oregonians have the right to know when hydrogen enters their homes, enabling informed dialogue and protecting consumer interests. As OPB noted, the bill was prompted by real-world situations in which "people only found out about hydrogen blending after it had already begun."

While the law does not restrict hydrogen for industrial and commercial uses — which advocates generally support when more controlled — it addresses the most sensitive and least studied context: residential systems.

Key Takeaways for Organizers and Advocates

- **Transparency First:** Even modest public notice laws can set important precedents.
- **Frame Safety Relationally:** Link safety risks to people's lived experiences and vulnerable family members.
- **Use Science Strategically:** Independent technical analysis strengthens advocacy and rebuts industry talking points.
- **Expect Entrenched Opposition:** Utilities, labor, and corporate Democrats may align to block even small reforms.
- **Know When to Compromise:** A smaller win today can be the stepping stone for stronger protections tomorrow.
- **Template for Others:** Washington's green hydrogen notice law inspired Oregon's approach; Oregon's law is now a national model.

References

- Baumhardt, A. (2025). NW Natural Pushes Back on Bill That Would Require Notifying Customers About Use of Hydrogen, Oregon Capital Chronicle.
- *Concerns over NW Natural Blending Project*, OPB, Aug. 5, 2024.
- Feinstein, L. (2024). *Hydrogen is Sneaking its Way into Oregon Homes*, Sightline Institute.
- SB 685 Enrolled