

# Innovative and Impactful Solutions

Applying the framework from *Taming the Sun*

**Taming the Sun:** Innovations to Harness Solar Energy and Power the Planet by Varun Sivaram.

Published by the MIT Press (March 2, 2018).

This blog entry is available on [Medium](#), 11 Dec 2019

## Reading and Reflection on the Book of Solar Energy

For more deployment of solar energy we need three kinds of innovations:

1) *Financial*,

2) *Technological*,

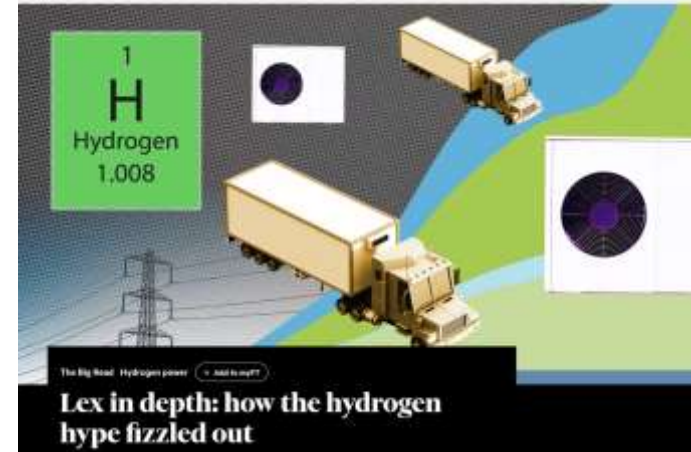
3) *Systemic innovations*.



22 May 2024

[Lex in depth:](#)  
[how the hydrogen hype fizzled out](#)

which the ***Financial Times*** called "the best available overview of where the solar industry finds itself today"



<https://www.ft.com/content/14a60649-172a-45c1-99a9-039f481430e7>

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The framework of innovations for hydrogen supply chain:

1. **Financial innovations** are critical to de-risking investments in hydrogen infrastructure and production. Creating attractive financial models can catalyze large-scale hydrogen deployment.
2. **Technological innovations** are essential to reduce production costs, improve storage and transportation, and increase the efficiency of electrolyzers. Investment in R&D will be crucial to overcome these barriers.
3. **Systemic innovations** must address the infrastructure challenges, integrate hydrogen into existing energy systems, and align policies across sectors. Hydrogen has a unique role to play in decarbonizing various sectors, so a coordinated approach is key.

Each of these innovations must evolve in parallel, building a robust hydrogen economy that can compete with fossil fuels while supporting the global transition to a low-carbon future.