

CleanTech Blueprint for the Future



Coalition for Innovation, supported by LG NOVA

Jami Diaz, Director Ecosystem Community & Startup Experience
William Barkis, Head of Grand Challenges & Ecosystem Development
Sokwoo Rhee, Ph.D., Executive Vice President, LG Electronics, Head, LG NOVA

Blueprint Chairs

Alex Fang, CleanTech Chair
Sarah Ennis, AI Chair
Alfred Poor, HealthTech Chair

Authors

Sayeed Ahmed, John Barton, Irene Chen, Darlene Damm, Alex Fang, Aman Johar, Ram Krishnan,
Tin Hang Liu, Winston Morton, Jiri Skopek, Julia Yan

The views and opinions expressed in the chapters and case studies that follow are those of the authors and do not necessarily reflect the views or positions of any entities they represent.

Senior Editor, Alfred Poor

October 2025



Preamble

The Coalition for Innovation is an initiative hosted by LG NOVA that creates the opportunity for innovators, entrepreneurs, and business leaders across sectors to come together to collaborate on important topics in technology to drive impact. The end goal: together we can leverage our collective knowledge to advance important work that drives positive impact in our communities and the world. The simple vision is that we can be stronger together and increase our individual and collective impact on the world through collaboration.

This “Blueprint for the Future” document (henceforth: “Blueprint”) defines a vision for the future through which technology innovation can improve the lives of people, their communities, and the planet. The goal is to lay out a vision and potentially provide the framework to start taking action in the areas of interest for the members of the Coalition. The chapters in this Blueprint are intended to be a “Big Tent” in which many diverse perspectives and interests and different approaches to impact can come together. Hence, the structure of the Blueprint is intended to be as inclusive as possible in which different chapters of the Blueprint focus on different topic areas, written by different authors with individual perspectives that may be less widely supported by the group.

Participation in the Coalition at large and authorship of the overall Blueprint document does not imply endorsement of the ideas of any specific chapter but rather acknowledges a contribution to the discussion and general engagement in the Coalition process that led to the publication of this Blueprint.

All contributors will be listed as “Authors” of the Blueprint in alphabetical order. The Co-Chairs for each Coalition will be listed as “Editors” also in alphabetical order. Authorship will include each individual author’s name along with optional title and optional organization at the author’s discretion.

Each chapter will list only the subset of participants that meaningfully contributed to that chapter. Authorship for chapters will be in rank order based on contribution: the first author(s) will have contributed the most, second author(s) second most, and so on. Equal contributions at each level will be listed as “Co-Authors”; if two or more authors contributed the most and contributed equally, they will be noted with an asterisk as “Co-First Authors”. If two authors contributed second-most and equally, they will be listed as “Co-Second Authors” and so on.

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The Coalition is intended to be a community-driven activity and where possible governance will be by majority vote of each domain group. Specifically, each Coalition will decide which topics are included as chapters by majority vote of the group. The approach is intended to be inclusive so we will ask that topics be included unless they are considered by the majority to be significantly out of scope.

We intend for the document to reach a broad, international audience, including:

- People involved in the three technology domains: CleanTech, AI, and HealthTech
- Researchers from academic and private institutions
- Investors
- Students
- Policy creators at the corporate level and all levels of government



Chapter 1: Introduction

Author: Alex Fang



Over the past decade, there has been a seismic shift in the technology at our disposal. Many of the core questions around the viability of a transition to cleaner, more efficient technologies have been answered. Solar electricity is now dramatically cheaper than fossil fuels. Grid-scale storage is no longer a fantasy but a fact. These are no longer theoretical breakthroughs — they are real, demonstrable truths.

And yet, cleantech finds itself in a complicated, awkward age. What science has proven and what engineering has enabled must now be reconciled with what society is willing to accept. Next-generation energy solutions have, almost inexplicably, become ideological flashpoints. Our hope is that this whitepaper offers a small window into the work of those who still believe—in science, in progress, and in the transformative power of truth to build a world that is cleaner, more abundant, and more just.

The Coalition for Innovation is not a conventional initiative; it is an experiment in collective curiosity.

It is an invitation to dream boldly and work together, grounded in the simple belief that science, technology, and human ingenuity still hold the keys to a better world.

We come together not to debate if a clean, equitable, and abundant future is possible—we come together to determine how to make it real, fast. This whitepaper, *A Blueprint for the Future*, is a living document authored by innovators, investors, scientists, policymakers, and entrepreneurs. It represents a “big tent” exploration of where cleantech is today, what barriers remain, and where we can go in the next five years—if we choose collaboration over competition, curiosity over cynicism, and courage over inertia.

A New Phase of the Clean Technology Journey

For decades, the clean technology community has been defined by its pursuit of technical



breakthroughs: cheaper photovoltaics, longer-lasting batteries, smarter grids, and more efficient systems. Much of that work has succeeded. Today, solar and wind are the cheapest forms of new energy generation in much of the world. Battery prices have fallen more than 80% in the past decade. Clean fuels, electric vehicles, and grid-scale storage are no longer fringe—they are feasible.

But our current challenge is not technical—it is cultural, political, and economic.

This is the messy middle. We have what we need to transition. But entrenched systems, legacy infrastructure, financial friction, misinformation, and polarized narratives hold us back. What began as an engineering challenge has become a societal one. The path forward requires a new form of innovation—one that is as social as it is scientific.

The Role of the Coalition

The Coalition for Innovation, hosted by LG NOVA, is a response to that moment. It is a platform where

people from different sectors — public and private, for-profit and nonprofit, lab and legislature — can come together to share ideas, build alliances, and identify common ground.

This Blueprint is a collective snapshot of that process. It does not attempt to impose a single vision of the future. Instead, it offers multiple entry points and perspectives, organized around practical, near-term action: financing strategies, commercialization bottlenecks, energy equity models, case studies in battery innovation and electrification, and new paradigms for how we define and measure impact.

Every contributor to this document shares a commitment to truth and to possibility. They believe that we can build systems that are cleaner and cheaper. They believe that science is not a threat to prosperity; it is a foundation for it. And they believe that abundance — of energy, of opportunity, of dignity — is possible when we invest in systems designed to deliver it.

Author (In order of contribution)

Alex Fang, Co-Founder, RoundZero

Alex co-founded RoundZero, where he is obsessed with deploying philanthropic capital where it matters most.





For more information about the Coalition for Innovation, including how you can get involved, please visit coalitionforinnovation.com.

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