



# 2012 MAP OF THE DECADE

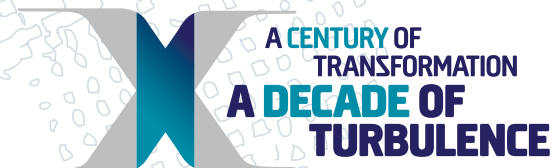
## THE FUTURE IS A QUESTION ABOUT WHAT IS POSSIBLE

We can imagine a decade of growth and collapse. We know those are both possible. We can face constraints and discipline ourselves to live in a world of new limits. But what about transformation? How do we think about a world that seems impossible by today's rules?

Can societies transform overnight? Can low probabilities add up to stunning new realities? Do the rules of reality themselves come into question as we probe ever deeper into science, nature, and the human mind? Are there limits on our ability to conceptualize the world around us, and can those limits be broken?

These are the questions that will inspire the coming decade. We know the business-as-usual forecasts. But the true challenge of the next ten years will be to anticipate the impossible futures—those that change the game overnight or in unimaginable ways.

The *2012 Map of the Decade* is a guide to these impossible futures. It's an at-a-glance tool for exploring the fundamental question: What is possible?



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# A CENTURY OF TRANSFORMATION A DECADE OF TURBULENCE

WHEN WE TAKE THE VERY LONG VIEW AND LOOK OUT OVER THE CENTURY, WE SEE A WORLD IN TRANSITION. WE CAN DESCRIBE THIS TRANSITION IN MANY WAYS:

- From a once rural **to a radically urban environment**
- From a fossil fuel economy **to a new energy paradigm**
- From large-scale manufacturing **to lightweight just-in-time production**
- From institutional wage labor **to vast webs of social producers**
- From information overload **to ubiquitous cognition**
- From humans as independent organisms **to humans as microbial ecosystems**

Each of these transitions is a story of transformation from an old pattern to a new. Today, even as the incumbent patterns are fading, a new world is taking shape. It's a world that will flourish by the end of the century. But in the transition from old to new will be turbulence. As the coming decade unfolds, the familiar patterns will no longer support the dreams they have promised to fulfill. At the same time, the new processes and platforms will still be fledgling. They won't be ready for flight.

Seen through this lens of two curves—a descent of the familiar and the ascent of the as-yet uncharted—the century presents itself as a classic two-curve problem. A gap opens up between the old and the new, and in this gap, extraordinary innovation and possibility emerge. But often, so do collapse and even chaos. The gap is where the impossible becomes possible. Sometimes for better, sometimes for worse.

This is the zone we're already entering today. For each of the great transitions, we're beginning a leap from the old to the new. It will be a time of high innovation and high friction as humanity navigates the tradeoffs in the gap between the incumbent and the emergent. And six big shifts will give shape to the decade ahead:

**The Big Buildout** as we build an urban environment that is half new by 2030

**The Big Power Shakeup** as we struggle to define a vision for our energy future

**The Big Shrink** as we develop platforms for making things at ever smaller scales

**The Big Value Shift** as we reorganize wealth around social production

**The Big Mind** as we embed not only information but our cognitive processes and social personalities in the cloud

**The Microscopic Self** as we re-identify with the human microbiome

# IMPOSSIBLE FUTURES

In the gap between the incumbent and the emergent, the impossible becomes possible. Four types of impossible futures take shape.

## TYPE 1 SCENARIOS HAPPEN TOO FAST TO BE BELIEVABLE

**the war on climate change** | Carbon impacts mount so quickly that mainstream energy resources are taxed to the limit for remediation. Alternative technologies are all that's left for daily life.

**once in a red moon** | China colonizes the moon to secure mineral resources—but leases land and mining rights to companies and nations around the world.

**the fabrication commons—enclosed!** | Open fabbers pioneer a new 3D open manufacturing commons. Just as quickly, a few smart companies launch the breakthrough platforms that enclose them.

**the connected police state** | In an always-on connected world, social rules and regulations are embedded invisibly into everyday systems.

## TYPE 2 SCENARIOS DEPEND ON THE CONJUNCTION OF TOO MANY IMPROBABILITIES

**subterranean sunsick blues** | Urban density, automotive pollution, cradle-to-cradle innovation, and virtual “nature” combine to make underground life more appealing than life above ground.

**a new fossil fuel century** | Carbon capture, new carbon fuel reserves, clean coal, and conservation turn the carbon peak into a carbon plateau.

**climate confederation** | With reliable tools for worldwide voting and lack of trust in national governments, cities emerge as leaders in global climate referenda.

**bot-mediated education** | Social bots are powerful educational tools as traditional educational methods

lose ground to free and open curricula with games for certification.

**the feral economy** | Steep unemployment worldwide combines with failure of reforms to make graft, corruption, and crime the norm for “doing business.”

**welcome to mendokistan** | California's struggling economy, sparsely populated regions, and embedded marijuana cultivation set the stage for a new opium economy in the state.

**microbial governance** | Research ties gut bacteria to emotional well-being at the same time as governments focus policy beyond GDP to measures of happiness and well-being.

## TYPE 3 SCENARIOS BREAK THE ACCEPTED RULES OF REALITY

**the world electric** | Wireless energy is useful at a large scale as the Casimir Effect is harnessed and open-source “Tesla boxes” proliferate.

**look for the robot label** | Robots are semi-sentient beings with personhood rights—even as they displace human workers.

**B.I.G. ends poverty** | A global basic income guarantee challenges conventional wisdom that productivity depends on the promise of money.

**thar be dragons** | Novogenesis challenges fundamental beliefs in extinction and creation of new life.

**human-technology phase shift** | In the face of forecasts that human population will reach infinity by the year 2026—a physical impossibility—a fundamental change in embodied intelligence is underway.

## TYPE 4 SCENARIOS DEPEND ON ALIEN CONCEPTS

**metametropolis** | Multisensory virtual street experiences render most global cities the “same place.”

**the pirate party wins!** | The political winds shift to favor the notion that the value of a creation comes not from owning IP but from using it.

**your mind is the product** | As ideas and dreams can be recorded directly from the brain to the cloud, intellectual property is extended to thoughts.

**persuasive delusion** | Cultural delusion becomes a valid mental health diagnosis as sophisticated remote interfaces to the human brain are weaponized to control behavior.

**brain stew** | A larger-than-human brain results from reading and writing signals to the intuition regions of the brain.

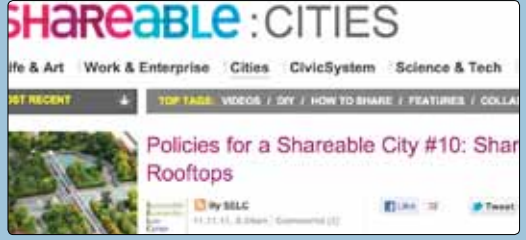
**microbial mobilization** | Humans have identities as superorganisms—ecosystems of human and bacterial cells that can be designed and managed.

# SIGNALS OF TRANSFORMATION



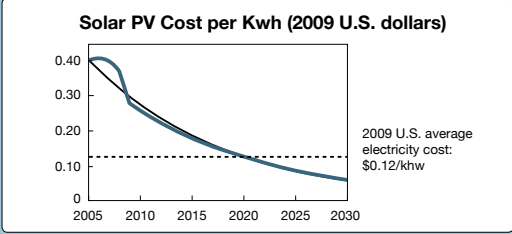
BNKR Arquitectura

**Earthscrapers** | A downward growth path for cities



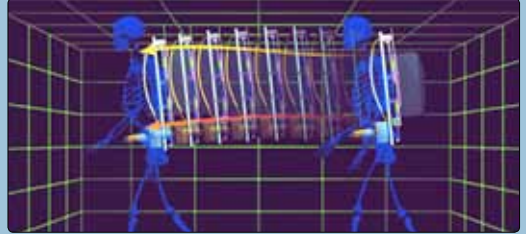
shareable.net

**Shareable cities** | Redesigning cities for shareability



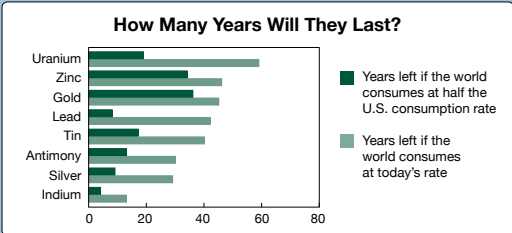
blogs.scientificamerican.com

**The cost of solar** | Less than the current cost of electricity by 2020



lightningpacks.com

**Lightning pack** | Mobile devices powered by your footsteps



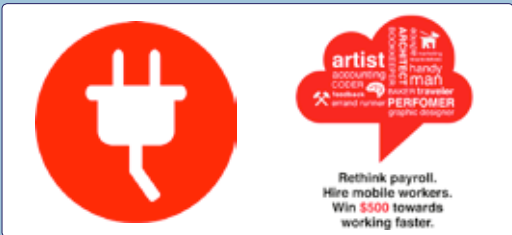
good.is

**Declining natural resources** | Critical shortages by mid-century



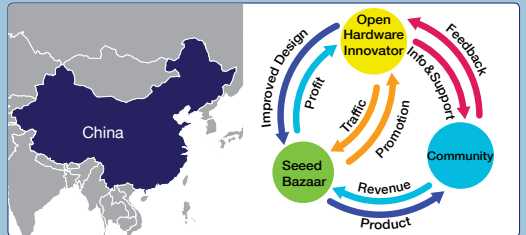
origo3dprinting.com

**Origo's 3D printer** | Just-in-time toys for DIY kids



blog.coffeeandpower.com

**Coffee and power** | Micro-enterprise platform for freelance workers



seedstudio.co

**Open fabbing** | China's platforms for open hardware



digitaltrends.com

**Singly** | Organizing digital spaces with personal information lockers



us.industrysourcing.com

**Brain imaging** | Seeing what you see in your mind's eye



commonfund.nih.gov

**The human microbiome project** | Mapping the microbes of the human body



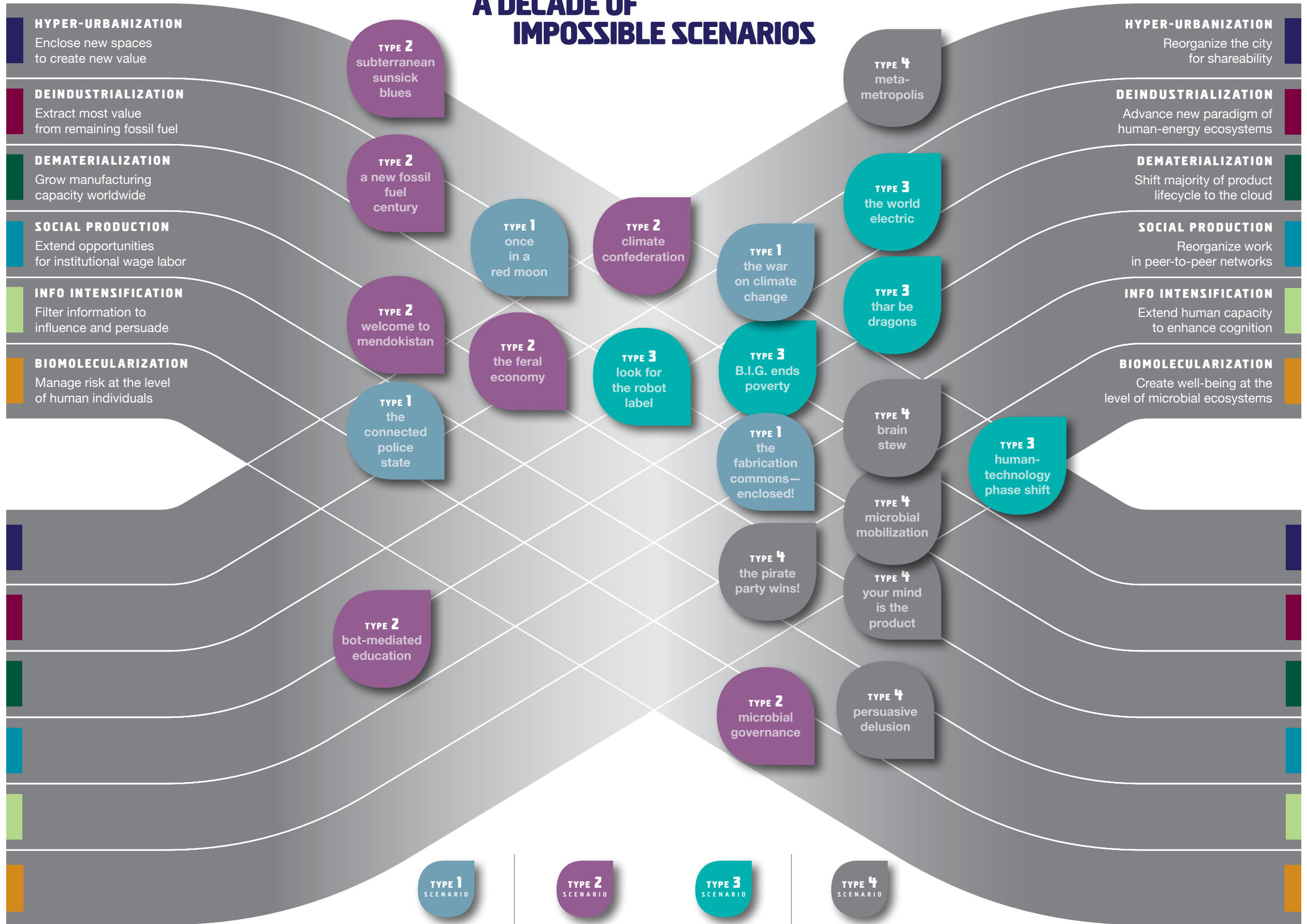
my.microbes.eu

**MyMicrobes** | Social network for your microbes

# SIX CURVES OF TRANSFORMATION: A DECADE OF IMPOSSIBLE SCENARIOS

INCUMBENT PATH

EMERGENT PATH



EMERGENT PATH

INCUMBENT PATH

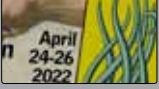
## EMERGENT PATH ARTIFACTS



PERSONAL IDENTITY CARD FAST-TRACKS GLOBAL VOTING



ENERGY WANTS TO BE FREE



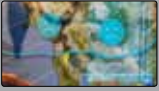
NOVOGENESIS PRIZE SEEKS PREDATOR FOR CEPHALOPODS



BASIC INCOME GUARANTEE REDEFINES “LIVING BIG”



THIS CITY BROUGHT TO YOU BY ADSTREAM



SAY “GOOD MORNING” TO THE MICROBIAL WEATHERMAP

## ARTIFACTS FROM THE FUTURE: WHAT THE DECADE COULD LOOK LIKE

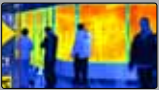
Artifacts from the future make the future concrete. They embody the concepts in scenarios—both possible and impossible—in the familiar objects and scenes of today’s world. They are first prototypes of a world to come.

This map comes with two decks of artifact cards for the scenarios that ride the incumbent and emergent paths. Most cards combine two or three scenarios to provide a distinctive window on the decade.

### USING THE CARDS:

- Immerse yourself or your team in the challenges of the incumbent economy
- Imagine the transformational forces at work in the coming decade
- Pull one card from each curve and ask: How can we win in both of these worlds at the same time?

## INCUMBENT PATH ARTIFACTS



ROBOTS SECURE SUBTERRANEAN CITIES



AIR-SCRUBBING TREES LOWER CARBON, RAISE IRE



JUST-IN-TIME GIFT-MAKING SAVES USPS



YOUR INSURANCE COVERAGE STOPS HERE



PROTECT YOUR MIND FROM COPYRIGHT INFRINGEMENT!



JUSTICES JUDGED ON THEIR BIOLITERACY

# HOW TO USE THIS MAP

This map is an at-a-glance view of the major forces that are shaping this century—and creating the turbulence of the coming decade. You can use it to orient your strategy for sustainability in the long run and to find winning plays in the near term.

## ANTICIPATE INFLECTION POINTS

The starting point of any two-curve problem is an S-curve: a trend that starts out in the margins of an industry or society at large and slowly establishes a foundation for growth. It often hits an inflection point where it appears to burst on the scene out of nowhere and the curve ascends steeply, usually undermining the incumbent trends and stakeholders. Track the six emergent curves and identify events or innovations that could trigger inflection points on each of them in the next few years.

## LOOK FOR EARLY ADOPTERS AND LATE FOLLOWERS

In a two-curve world, you need strategies for two different markets or constituencies. The late followers may be your loyal base that you need to sustain yourself in the incumbent scenarios. The early adopters are your future base, and you need to get to know them as early as possible and uncover new ways of working with them. Develop winning strategies for both.

## DEVELOP A LEAP PLAN

The critical choice for everyone in a two-curve world is when to leap from the incumbent curve to the emergent curve. Leap too soon, and you don't have a strong following. Leap too late, and someone has already beat you to the rewards. Develop a story of how you make the leap. Then identify critical signals or thresholds that will trigger your leap.

## FUTURE-PROOF YOUR PLANS

The curves on the map tell the big stories, and you could just follow them to build your strategy. But the impossible scenarios can make a shambles of plans. Use them to future-proof your strategy. Start with one—or two or three of them together—and ask, “What if this actually happens? How would our strategy work in this world? What can we do today to make sure that we can win, even in this seemingly impossible scenario?”

## CREATE YOUR OWN IMPOSSIBLE SCENARIOS

The “Futures: Impossible!” typology of scenarios is a great place to start generating your own impossible scenarios. Start from the scenarios on the map and customize them. Or use the four types—impossible timeframes, improbable conjunctions, reality breaking, and alien concepts—to challenge your thinking about your plans and strategies.

## HACK THE FUTURE TODAY!

You can start making the future you want today. Scan the map and set a couple of impossible goals. Then, create an artifact from the future that prototypes a way of getting to that goal. Or create a micro-network of people you want to work on the goal with you. Or try a Kickstarter project to fund something that might seem impossible. Or just create your own mini-manifesto. Small actions can make a big difference in a world of turbulence.

### FOR MORE INSIGHT INTO THE CHALLENGES OF A TWO-CURVE WORLD,

Visit [ianmorrison.com](http://ianmorrison.com), where Ian Morrison, former IFTF president and author of *The Second Curve*, shares three quick video lectures on the challenges and opportunities of two-curve problems.

