Let's Take Off Our Rose-Colored Glasses.

The climate is changing rapidly, and we have a short, 10-year runway to avoid irreparable harm.[1] We're putting climate in focus because our responsibility to act as industry leaders has never been more pressing. We need to get clear fast and move with urgency.

As strategists, we have to make decisions with a limited understanding of the future. We cannot predict the future, nor can we will our version of the future into being. Instead, we must determine the conditions that will influence our future and determine how to maneuver, toward our goals, within those conditions.

There are two truths, one environmental and one social, that we have to contend with to design the policies, programs, and interventions necessary to ready our communities for climate change.

Truth 1. The impacts of climate change are occurring now. And they will continue to occur with greater frequency and devastating effects.

Truth 2. Income inequality is growing. The wealthy will continue to amass more wealth. The poor will get poorer.

Solving for climate and equity is the critical work of our time. Now that our glasses are off, how might we act in light of these truths?

"The future is already here—it's just not evenly distributed."

– William Gibson

This quote is often used to describe innovation, but it works on multiple levels. When examining responses to climate change, this quote makes us question: What environmental and social events are occurring now that indicate how we might respond to climate challenges in the future, if the status quo is maintained?

Grids

Pacific Gas & Electric's (PG&E) recent forced blackout was an aggressive response to growing wildfire risks that left roughly two million people in the dark.[2] Brought about by a complex combination of suburban sprawl, poor land management and maintenance practices, and climate change, it is a clear example of the inequities built into our adaptation to a changing climate.[3]

PG&E's Public Safety Power Shutoffs (PSPS) highlight the equity issues that are inherent to our response to climate change. People who can afford to deploy back-up generators or solar-and-storage solutions will have the luxury of flipping the switch, while disadvantaged populations will bear the burden of going days without power.

Vulnerable people suffered the most from the shutoff—the elderly and people with disabilities who depend on medical equipment at home—as did low-income families who faced food insecurity without refrigeration.[4]

Nets

Income inequality is at its highest level in the U.S. since the Census Bureau started tracking it more than 50 years ago.[5] According to a recent report released by the Federal Reserve, 50% of U.S. residents hold less than 10% of total assets. Further, the wealth share of the bottom 50% has dropped by 2.4% and the wealth share of the 50 – 90% has dropped by 6.5% from 1989 – 2018, indicating that the middle class is, in fact, disappearing.[6]

Safety nets are a perfect description of how we have dealt with economic inequality. Have you ever tried to pull yourself out of a net or hammock quickly? It is nearly impossible. So is adapting to sudden change when you are living paycheck to paycheck.

Our social safety net programs are band aids, not vaccinations, and our energy programs are no different. To address the heart of the challenges ahead, we need to re-envision how we think about the intersection of resiliency and the economics of day-to-day life. No amount of weather stripping will help a person save for first and last month's rent when they need to move out of a floodplain.

It is in our collective best interest to tackle climate change and inequality. It is in utilities' best interest as well. We must ensure that the public can afford power, as well as work to alleviate the growing disparities between those who can afford to adapt and those who cannot.

Chairs

We need to approach problems differently. As social scientists, we know that our social, political, and cultural environments determine how well we will weather our greatest challenges.

First, we need to think small to impact big changes. To tackle our biggest challenges on micro levels we need to focus on communities. By bringing communities to the table, we can begin to co-create energy programs and policies that suit the unique needs of the regions we serve. What types of technologies are customers interested in receiving? How might they be delivered? Who should own these assets? How might they be paid for? These questions will serve as the building blocks to savvier, more resilient energy resources.

Second, we need to take seriously the challenges of vertically integrated utilities. Our current electric grid is failing us. Old, big, and inefficient, it no longer serves the demands of our societies and climate. We need to save the role of the utility while we transform our grid. Here's why.

Utilities have a mandate to serve. And we need them to continue to serve. Big tech and Silicon Valley are not held to the same standards of service. We quickly fetishize new technologies and cast them as a panacea to our problems, but the reality is that innovation with effective regulation is, and has been, the only mechanism to ensure that the interests of the public are maintained. This is how the benefits of industrial advancements are democratized.

There are roles utilities can play that no other entity can:

1. Democratizing emerging technologies so all benefit from innovation
2. Creating data and interoperability standards that foster ingenuity and reliability
3. Enabling connected platforms and networks for a responsive and adaptive grid
4. Building utility-connected microgrids with sufficient redundancies in generation and storage
5. Centering human resiliency in infrastructure design, development, and evaluation

So, how might utilities maneuver in the future? Val Jensen's interview on the following pages offers excellent insight into how Exelon is thinking about the challenges of climate change and poverty. In *From Grid to Human Resilience: Lessons from Public Health*, we explore how we can shift our framework for resiliency from one that responds to emergencies, to the daily act of preparing communities for the impacts of climate change. In *Get Smart! Applying Smart Thermostat Lessons to DERs* we offer ways in which the implementation of smart thermostats provide a playbook for utilities to scale DER technology adoption and drive participation in programs essential to creating an adaptive grid. While in *Reach Anxiety,* we argue that barriers to EV affordability are making it more difficult for cities and states to achieve aggressive EV mandates. Throughout this magazine, we shed light on the issues of climate and equity and the solutions that can make a dent in our biggest challenges.

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