



Eliminating the green premium

Good data and comprehensive greenhouse gas (GHG) inventory models can help governments achieve carbon neutrality without necessarily paying a premium

Many state and local governments are struggling to develop plans to meet greenhouse gas (GHG) emission targets by the deadlines they've been given. Of course, putting a stake in the ground with a target date is a critical step to accomplish any goal, particularly one of such magnitude. To paraphrase Samuel Johnson, there's nothing like an impending deadline to concentrate the mind.

Whether these deadlines have been voluntarily chosen or prescribed by regulation or other mandate, there's a good chance they did not come from bottom-up scheduling—that is, by working forward from current conditions to determine a date by which carbon neutrality could reasonably be achieved, taking into account the lowest whole life cost, available and anticipated technologies, and the current state and age of the infrastructure and equipment.

As a result, governments may find themselves having to work backwards from these target dates to devise their plans. This is especially challenging at the state and local level, where most decarbonization goals span entire regions, extending well beyond assets under their direct control and may include all buildings or vehicles in a city, for example, whether publicly or privately owned. Even when deadlines have been agreed to, an agency may not have a detailed, data-driven roadmap for hitting them, and could fall into the trap of simply making well-intentioned guesses.

Why modern government is important

Government agencies in the U.S. must modernize in order to keep up with changing user needs, regulations, and health and public safety requirements. Leaders of modern governments rethink business processes and service delivery models to more effectively achieve their mission. This article is one of a series that features how modernizing affects the government workforce and the user experience, improves security and public trust, and accelerates the digital journey. KPMG team members offer insights intended to help guide governments in their modernization efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, and trusted organizations.





Enlightened self-interest

Despite the challenge, the incentives for achieving carbon neutrality extend beyond environmental altruism. Many have come to realize that going green can deliver other benefits. In many cases, the same strategies and tactics that help government agencies or the states or municipalities overseen by governments reduce their carbon footprint can also help them increase their efficiency, resiliency and sustainability—it can be economically beneficial. “Enlightened self-interest” can help propel you to make going green a win-win.

Yet cashing in on this “green bonus” can often seem like a pipe dream. In fact, Bill Gates¹ coined the term “green premium” to describe the extra cost associated with switching to zero-carbon alternatives, compared to using products or processes based on today’s carbon-emitting technologies. The implication is that going green will cost you—not save you money.

So which is true? Is there a green premium or a green bonus in your future? The answer is: It depends on how well you plan.

¹ Source: Adi Ignatius, “It Will Need to Be the Most Amazing Thing Humankind Has Ever Done,” Harvard Business Review, March-April 2021



Calculating your green premium

Consider, for example, something like a government-run seaport or airport. The controlling agency may own hundreds of vehicles, including trucks, container handling equipment, fork lifts, and so on, all of which may currently use fossil fuels. Suddenly switching them all to electric versions may come at a premium, especially when there is useful life remaining on each one. These vehicles will likely have little resale value or even no resale market at all regardless of their age or condition. Value will be lost.

But what if the decarbonization plan accounted for the useful life of each asset? What if current vehicles aren't replaced with green alternatives until they reach end of life?

What does this mean for your current, seemingly arbitrary deadline for zero emissions? A plan built from the ground-up may well result in a different completion date. For example, waiting for each vehicle's useful life to end might mean you reach zero emissions by 2040, far later than a "top-down" chosen 2030 goal. Replacing the vehicles to meet the 2030 goal might mean replacing vehicles with significant useful life remaining. In other words, hitting a 2030 goal is likely to come with a green premium, while waiting until 2040 may eliminate it.

Given your current decarbonization plans, have you accounted for this green premium? Have you calculated it? Have you determined a more optimal target date that reduces or eliminates it? Are you even able to calculate this?

Planning for this alone can require a complex model that can track the useful life and replacement costs of each vehicle in the fleet. Such proper lifecycle cost analysis is just one piece of the equation. What about all the other "moving parts" in this transition? What will charging stations cost? Where will they be installed? Does your electrical source currently support the additional draw? What might it cost if you have to accelerate this? Have you accounted for the impact that the time to charge your electrical vehicles will have on your schedules?

What about when the assets are largely out of your control? A seaport, for example, typically relies on thousands of privately owned trucks. It may be easy to declare a mandate that all of them must be electric by a certain date or they're not allowed access, but is it a realistic goal? Truck owners—many if not most of whom are sole proprietors or small, independent businesses—are going to have the same useful-life and downtime challenges. Can you force someone to give up a truck with 10 or more years of useful life and make them pay the "green premium"? What happens to your port if a significant percentage of them can't or won't? Do you charge an extra fee for fossil-fuel-powered trucks to access the port in the same way that some cities are considering charging all gas-powered vehicles for access? What effect might grants or other incentives have on the rate of adoption? What happens with all these issues if the deadlines are pushed out?

Understanding the effects can be especially problematic given the novelty of the green alternatives. Electric trucks, for example, are still largely untested, and the impact of charging downtime and switching maintenance expertise must be accounted for despite having few real-world examples.



Additional benefits

Having a robust interactive model that enables you to explore these “what-if” scenarios—including the costs associated with them—is essential if you want your plan to be more than just a bunch of guesses strung together.

Beyond these insights, there are other important benefits to having a sophisticated model. Most states have received grants from the federal government to explore their options, and local governments can apply for their own. Having a robust model that can realistically calculate the cost-benefit ratios of proposed actions could give you a leg up when competing for such awards. They also can help to reduce the burden of reporting requirements that come along with these grants.

There’s also the benefit of providing some cover when budgets are exceeded or target dates missed because they were simply unrealistic. A good model would help you know well in advance that these things were coming, allow you to set expectations, offer alternatives and demonstrate that a failure to meet targets wasn’t the result of ineptitude or a lack of caring.

In short, a good model, supported by sound data, is arguably the best planning tool you can have, and having a realistic view of your options and their potential effects can help you turn guesses into fully rationalized decisions and your green premium into a green bonus.

How KPMG can help

We help state and local governments develop lifecycle-based GHG inventory models designed to more accurately calculate current and future emissions and quantify the impact of GHG reduction measures on a constantly evolving asset base, allowing them to advance their decarbonization planning and deliver much needed insights.

Our professionals immerse themselves in your organization, applying industry and public-sector knowledge, powerful solutions and innovative technology to deliver sustainable results. Whether it’s helping you develop an overarching climate action plan, develop detailed GHG inventories, quantify the benefits, or conversely more accurately assess the cost of inaction, KPMG creates tailored data-driven solutions that help you deliver value, drive innovation and build stakeholder trust.



About KPMG

KPMG has worked with federal, state, and local governments for more than a century, so we know how agencies work. Our team understands the unique issues, pressures, and challenges you encounter in the journey to modernize. We draw on our government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you from beginning to end to deliver the results that matter.

The KPMG team starts with the business issue before we determine the solution because we understand the ultimate mission. When the way people work changes, our team brings the leading training practices to make sure your employees have the right knowledge and skills. We also help your people get value out of technology while also assisting with cloud, advanced analytics, intelligent automation, and cybersecurity. Our passion is to create value, inspire trust, and help government clients deliver better experiences to workers, citizens, and communities.



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