



## EMBRACING SCIENCE FOR BETTER: IF NOT NOW, WHEN?

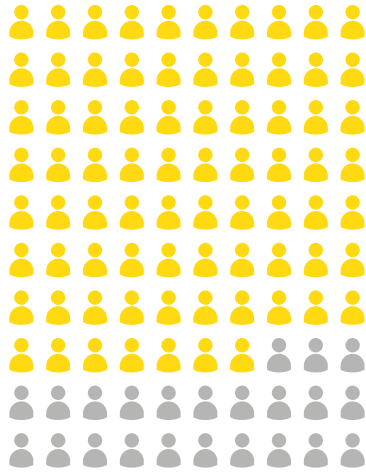
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Science shapes so many aspects of everyday life, sometimes in ways that go unnoticed. The packaged food we buy, the fabric of our clothes, the cars we drive—all are available to us today because of decades of scientific progress. At the core of this progress lies the desire to increase our knowledge about the world; it is the same curiosity that enabled us to split atoms, understand the universe, discover the polio vaccine. There is no doubt that science permeates all corners of humanity, so why is society yet to embrace its fullest potential?

As a scientist, I've seen first-hand the incredible possibilities of science. I know that if we do a better job at putting science front and center in policymaking, business, and everyday life, we can make significant strides in our collective efforts to address our world's most pressing problems. Yet, I am concerned with the opportunity and time

we have lost—and are losing—by not doing so consistently.

The conditions to further elevate science and scientific knowledge as a reliable force for good are ripe. The latest findings from an international survey—published by Philip Morris International (PMI) in a white paper entitled “[In Support of the Primacy of Science](#)”—confirm that people around the world value science and scientific information. An emphatic majority, 77 percent of the people surveyed in 19 countries and territories around the world, are hopeful that advances in science can deliver solutions to society's biggest problems, while most of the respondents stated that they would be influenced by science in how to go about their everyday life, particularly as it concerns physical distance— and transportation-related decisions in the face of COVID-19.



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OF PEOPLE ARE HOPEFUL THAT ADVANCES  
IN SCIENCE CAN DELIVER SOLUTIONS TO  
SOCIETY'S BIGGEST PROBLEMS

SOURCE: PHILIP MORRIS INTERNATIONAL WHITE PAPER "IN SUPPORT OF THE PRIMACY OF SCIENCE", SEPTEMBER 2020

## WHAT'S HOLDING US BACK?

First, there is a notable disconnect between the importance people ascribe to science and how science is perceived and leveraged by broader society. What is particularly telling is the gap between the widespread support for bringing science into policymaking (84 percent) and the bare majority of 51 percent who rated their government as doing a good job of ensuring that science and scientific evidence are included in decision-making processes. Regulators can and should do more to meet society's expectations by leveraging facts and the totality of available evidence to inform their policies. It is equally important that policymakers debate the data openly and transparently, so that people see and understand how science is shaping their decisions.

Regulatory frameworks that put science and evidence at the heart of decision-making already exist. One such example is the [U.S. FDA Modified Risk Tobacco Product Application](#) process, which sets a clear pathway for the assessment of and communication about nicotine-containing products that can be a better choice for adults who would otherwise continue to smoke. To be clear, these

products are not risk-free and the best choice for smokers is to quit tobacco and nicotine altogether. But for people who continue to smoke, this framework shows how governments can regulate smoke-free alternatives to differentiate them from cigarettes in order to promote the public health—an approach that I hope to see considered in other countries beyond the U.S.

Challenges around people's access to reliable scientific information create more impediments to the primacy of science today. In our survey results, despite the significant interest in scientific information, most respondents (nearly half of the total sample) indicated that they find it difficult to access reliable information about scientific developments and relevant studies. This finding should concern us. When reliable scientific information is in short supply, people may be more susceptible to misinformation, wild guesses, and hearsay—all of which hinder their ability to make informed decisions.

The absence of accurate scientific information creates the conditions for "junk" or bad science to gain prominence. Poorly executed scientific studies, skewed results shaped by bias, media



headlines that misrepresent findings are common examples, and they certainly should remain the exception rather than the rule. But even exceptional cases constitute a major threat, not only because they can misinform the public, but also because they weaken people's trust in science. As a case in point: In the U.S., an August 2020 Gallup poll showed that [one in three Americans would not get the COVID vaccine if available today](#), a finding that should ring the alarm that a growing number of Americans have lost trust because of perceived politicization of the debate around vaccines and the science supporting them.

The prospect is gloomy. But with my scientific background and experience with scientific progress in the private sector—first in the pharmaceutical sector and today in PMI with our work to deliver a smoke-free future—I will not lose hope. I've seen that science prevails and that facts and evidence ultimately become too difficult to ignore. After all, science and the scientific community have

an incredible ability to self-correct. Peer reviews, independent verification, crowdsourcing, open and continued dialogue are just some of the ways our community examines the evidence and ultimately advances knowledge.

This approach can be leveraged more broadly, beyond the scientific community. More people can become actively involved in creating, implementing, and supporting better science-based policies, whether as policymakers, opinion leaders, or simply as citizens. We have great challenges ahead of us—climate change and the novel coronavirus pandemic, to name just two—so ensuring science takes precedence over ideology, politics, and unsubstantiated beliefs is of pressing importance. We can only make breakthrough progress if we remain curious and are willing to change our mind in the face of new evidence.

Just as the scientific mindset requires.

**UNSMOKE YOUR MIND. TOGETHER WE CAN MAKE A DIFFERENCE. [PMI.COM/SCIENCEFIRST](https://www.pmi.com/sciencefirst)**

**UNSMOKE YOUR MIND**