

- This Committee has proven itself ever ready to rise to the occasion of working together to identify and enact solutions to both present and future issues facing our country.
- As Chairman, I am committed to continuing these traditions and working with all of my colleagues on the issues that are important to their states and to our nation.
- Climate change is one of those issues – critical not only to our states, and our nation, but to every country around the world.
- To address climate change, we must face it, head on, on a global scale and in every sector of our economy.
- No doubt we will all have differing views on the best way to do that.
- But, first, I believe we must begin with a common understanding of where we stand today, and what got us here.
- I have long said that you are entitled to your own opinions, but not your own facts.
- And it is in that spirit that I wanted our first hearing of this new Congress to focus on setting a baseline of global climate facts from which this Committee can build on as we advance climate solutions.
- In 2019, a few of my colleagues and I visited the Arctic where we met with several leaders, and in each country we visited, we saw the impact of climate change firsthand and heard from those leaders that it was a matter of survival, not of partisan politics.
- This Committee has shown the ability to rise above that – as evidenced by the recent enactment of the Energy Act, our all-of-the-above energy innovation package with provisions sponsored by almost 70 Senators last year.

- It is abundantly clear that dwelling on partisan rhetoric shuts down debate, collaboration, and progress.
- As we look for ways to heal the divisions in our own country, I believe that one way for us to overcome our differences of opinion is by first grounding ourselves in the facts, which will serve as a guide going forward.
- Before hearing from our panel today, there is one fact that I would like to serve as our starting point, and that is that climate change is real and largely linked to human activity.
- Scientists around the world, including in our own National Laboratories, are researching many aspects of climate change.
- And the scientific record is convincing and growing.
- This year, the Intergovernmental Panel on Climate Change will release its sixth comprehensive report on global climate change, and I look forward to learning the new findings.
- We also have an immense amount of energy data at our fingertips thanks to the incredible work of the U.S. Energy Information Administration and international organizations like the International Energy Agency.
- A snapshot of that data shows that, in the past ten to fifteen years, the United States has seen a major transition in its energy markets.
- The cost of natural gas has been cut in half from 2010 to 2020, and the cost of wind has fallen by 70%, and the cost of solar has fallen by 90%.
- When paired with increasing energy efficiency, this has led to a rapidly changing electric power sector that is much less carbon-

intensive but in which coal power plant retirements have devastated communities across my home state of West Virginia, along with many traditional energy producing states represented on this committee.

- That raises two points that we must recognize about fossil fuels.
- In the domestic context, the energy transition has increased hardship in the areas of the United States that have powered our nation for decades by mining its coal, producing its fuels, and generating its electricity.
- As our energy mix has changed, concern about the impacts on these traditional energy communities has and will remain front of mind for many of our members.
- I will continue to work hard to ensure that those communities are given new opportunities to thrive, including as a member of the new IEA global commission focused on examining the impacts of a clean energy transition on individuals and communities.
- I am honored to join this effort and confident our discussion today will provide a strong foundation for discussions ahead as we work to address climate change and leave no one behind.
- We must also recognize that, although fossil fuel consumption is dropping on the U.S. power grid, the global trends in fossil fuel use should make us all recognize that fossil fuels aren't going anywhere anytime soon, particularly in countries that are seeking to expand access to electricity and energy in order to address poverty.
- In both the domestic and international arenas, however, the fact is that we have tackled these challenges before and we can overcome

them again by focusing on the technological innovations needed to do so.

- Following the Clean Air Act Amendments in 1990, electric utilities across the United States developed and adopted equipment that aided their compliance with the new laws to reduce or eliminate SO_x, NO_x, and particulate matter.
- By outlining the facts about air pollution and developing the technologies needed to manage it, utilities were able to adapt, improve public health, and maintain jobs – all at a lower cost than what was initially projected.
- This provides one principle for our Committee’s work going forward: the power of innovation, combined with keeping all of our options on the table, will help us create high quality jobs, reach our environmental goals, and do so cost-effectively.
- I also think it applies in the global arena as we look to lead the world on tackling the climate challenge.
- We must remember that the rest of the world isn’t necessarily ready to follow the same pathway.
- By pursuing an all-of-the-above energy policy and a broad array of emissions reducing technologies, we can simultaneously build our technology export opportunities and diplomatic relationships with those countries who choose to utilize their own fossil resources.
- Today’s panel includes experts that bring domestic as well as global perspectives, including:
 - Dr. Birol, the Executive Director of the International Energy Agency;

- Dr. Richard Newell, the President and CEO of Resources for the Future;
 - Dr. Angel Hsu [SUE], an Assistant Professor at the University of North Carolina;
 - Dr. Scott Tinker, the Director of the Bureau of Economic Geology at the University of Texas; and
 - Mr. Mark Mills, a Senior Fellow at the Manhattan Institute.
- I'd like to welcome all of you to the Committee for this important retrospective discussion that will set the scene for forward looking solutions.
 - I look forward to hearing about and discussing the trends and current state of play in global and domestic energy markets, technologies, policies, and emission reductions.
 - Of course the raw data and percentages are just the tip of the iceberg. Below the surface the changes we've seen were being driven by innovation, policy, markets, and incentives.
 - This discussion will serve an important role in setting a baseline of common facts and a historical perspective for this Committee from which we identify the common challenges and opportunities and move quickly to address them.
 - With that, I'll turn it over to Senator Barrasso for his opening statement.