Nuclear Energy Innovation

In its early days, nuclear power was met with both great interest and fear by the world's population. On one hand, it provided a clean source of energy with nearly unparalleled output potential. On the other hand, the world had been rocked by the atomic bombings of Hiroshima and Nagasaki and feared nuclear weapon proliferation. Thus, the International Atomic Energy Agency, or IAEA, was created by the United Nations. Its goal was to help guide nuclear development in member nations and inspect the safety and development of nuclear applications. Since then, nuclear power has seen immense stagnation in terms of both implementation and innovation: with research stalled and nuclear reactors being phased out entirely in many parts of the world, the fear we have of nuclear explosions seems to outweigh the potential for clean, renewable energy in the public zeitgeist. While there are still a few hubs of nuclear development, the culture around it remains relatively hostile.

As delegates, it will be your responsibility to discuss issues of nuclear power expansion in both countries with existing nuclear capabilities and those without them. According to the 2016 Paris Agreement, all 193 signing members will have to submit a plan known as a Nationally Determined Contribution that outlines how the nation will reduce carbon emissions for that year (UN). Nuclear power represents a brilliant potential source of clean energy. According to the Nuclear Energy Institute, nuclear power prevents 470 million metric tons of carbon dioxide from entering the atmosphere with power generated that would otherwise come from fossil fuels. As the Paris Agreement outlines, 192 nations plus the European Union have pledged to be carbon neutral and achieve net-zero emissions by 2050. And yet, nuclear power usage is decreasing: while providing 17% of global power in 1996, today, that number sits closer to 10%.

Balancing the needs of industrializing member nations with the goal of carbon neutrality is crucial to our future, and it will be your job to discuss how to reconcile these two seemingly competing factors.