



PLATFORM

UN Climate Change Conference (COP21) Paris 2015

Background

The American Nuclear Society (ANS) recognizes that the earth's climate has changed. Human activities, notably the production of greenhouse gases, have contributed to this phenomenon. The risks presented by rising temperatures across the globe are sufficiently large to justify enactment of policies at the national and international levels.

ANS supports global policies designed to address carbon emission reductions that are performance-based and technology neutral. Carbon-reduction policies should not explicitly privilege any one energy source over another. Instead, such policies should evaluate energy sources based upon their ability to reliably contribute to meeting carbon reduction goals.

Nuclear energy has a crucial role to play in addressing the global need for reduced emissions from energy generation. The increased use of nuclear energy in offsetting the use of fossil fuels where appropriate offers an effective means of reducing global carbon emissions.

ANS recognizes the value of energy diversity and believes that other low-carbon energy technologies (such as wind, solar, and hydro) should be deployed as appropriate, while recognizing the benefits and drawbacks associated with each technology. However, with the exception of hydro, renewable sources are limited by their intermittency, requirement of backup power generation and storage capabilities. It is essential that policymakers recognize that nuclear energy delivers large amounts of reliable, economically competitive electricity with no carbon emissions during reactor operations, and has among the lowest lifecycle carbon emissions of any energy source.¹

The ongoing global climate talks taking place during COP21 are aimed at reducing carbon emissions from all sources. Significantly reducing carbon emissions while meeting the world's growing energy demands must include nuclear as a major provider of zero carbon energy. Nuclear energy demonstrates its capabilities as a baseload provider of carbon-free energy by producing:

- 11% of global electricity
- 27% of Europe's electricity
- 53% of global carbon-free electricity
- 20% of U.S. electricity

According to the latest World Energy Outlook published by the International Atomic Energy Agency (IAEA), nuclear energy has already avoided the release of around 56 Gt of CO₂ since 1971, which is equivalent to two years of emissions at current rates. By 2040, it is forecast to avoid the release of almost four years of CO₂ emissions at current rates.

American Nuclear Society UNFCCC/COP21 Platform

To meet proposed global warming goals (below 2° C), it is essential that the United Nations Framework Convention on Climate Change (UNFCCC COP21/CMP11) agreement:

1. Is performance-based and technology neutral.
2. Does not favor any individual energy technology over others.
3. Includes nuclear among the clean energy sources available to meet carbon reduction goals.
4. Encourages and allows nations to make independent decisions about their energy portfolios.
5. Ensures that every nation has the freedom and ability to choose from all available energy sources offering the lowest lifecycle carbon emissions.
6. Facilitates the continuation, expansion and creation of new international clean energy technology advancements by preserving the inclusion of all possible energy options for ensuring that global climate protection goals are reached.

ANS was one of 39 nuclear associations that signed the Nice Declaration in 2015, a major initiative of the Nuclear for Climate global initiative. The participating societies declared, "We proudly believe that nuclear energy is a key part of the solution in the fight against climate change."

Nuclear for Climates call for the new UNFCCC Protocols to recognize nuclear energy as a low-carbon energy option, and to include it in its funding mechanisms, as is the case for all other low-carbon energy sources.

References

1. "Life-Cycle Assessment of Electricity Generation Systems and Applications for Climate Change Policy Analysis," Paul J. Meier, University of Wisconsin-Madison, August 2002.

NUCLEAR FOR CLIMATE DECLARATION

MAY 4, 2015
NICE, FRANCE

WE THE UNDERSIGNED,

Scientists, engineers, and professionals representing regional, national and international scientific societies, as well as numerous technical organizations dedicated to the development and peaceful use of nuclear technology,

Gathered here today in Nice - France

ACKNOWLEDGE the unequivocal conclusions reached by the majority of climatologists, as stated in the peer reviewed Fifth Assessment Report of the International Panel on Climate Change (IPCC) that "human activities have contributed to changes in the Earth's climate";

are HOPEFUL in regards to the outcomes of the Climate Change Conference that will take place in Paris in December 2015 - COP 21 (Conference of Parties);

COGNISANT of the fact that, according to OECD (Organisation for Economic Cooperation and Development), while the global population is expected to reach about 10 billion, with increasing development, electricity demand is currently on track to double by 2050;

SHARE the objective of limiting global warming to a maximum of 2°C by 2050, which will require, according to IPCC, 80% of electricity to come from low-carbon sources by that time (up from only 30% now);

are CONSCIOUS that this presents a massive challenge which will require the deployment of all available low-carbon technologies;

are CONVINCED that the world needs to take immediate steps to reduce greenhouse gas emissions, as a large share of the carbon budget has already been consumed, and that we cannot wait for future technologies to be ready for deployment before launching our decarbonisation efforts;

RECOGNIZE that nuclear energy is one of handful of options available at scale which can help to reduce energy related greenhouse gas emissions, and would emphasise that this view is shared by the OECD (Organisation for Economic Cooperation and Development) and IPCC.

Hereby declare that

WE PROUDLY BELIEVE THAT NUCLEAR ENERGY IS A KEY PART OF THE SOLUTION IN THE FIGHT AGAINST CLIMATE CHANGE

and BELIEVE that each country needs access to the widest possible portfolio of low-carbon technologies available, including nuclear energy, in order to reduce CO2 emissions and meet other energy goals;

CALL FOR the new UNFCCC (United Nations Framework Convention on Climate Change) Protocols to recognize nuclear energy as a low-carbon energy option, and to include it in its climate funding mechanisms, as is the case for all other low-carbon energy sources.

have DECIDED to jointly sign this declaration and would like to bring it to the attention of decision-makers.



American Nuclear Society (ANS) - Argentine Association of Nuclear Technology (AATN) - Atomic Energy Society of Japan (AESJ) - Australian Nuclear Association (ANA) - Austrian Nuclear Society (OKG) - Belgian Nuclear Society (BNS) - Brazilian Nuclear Energy Association (ABEN) - Bulgarian Nuclear Society (BGNS) - Canadian Nuclear Society (CNS-SNC) - Chinese Nuclear Society (CNS) - Croatian Nuclear Society (HND) - Czech Nuclear Society (CNS) - European Nuclear Society (ENS) - Finnish Nuclear Society (ATS) - French Nuclear Energy Society (SFEN) - German Nuclear Society (KTG) - Hungarian Nuclear Society (MNT) - International Nuclear Society Council (INSC) - Italian Nuclear Association (AIN) - Korean Nuclear Society (KNS) - Latin American Section of the American - Nuclear Society (LAS/ANS) - Lithuanian Nuclear Energy Association (BEA) - Malaysia Nuclear Society (PNM) - Mexican Nuclear Society (SNM) - Mongolian Nuclear Society (MNS) - Netherlands Nuclear Society (NNS) - Nuclear Engineers Society of Turkey (NMD) - Nuclear Industry Association South Africa (NIASA) - Nuclear Institute (NI) - Nuclear Society of Kazakhstan (NSK) - Nuclear Society of Russia (NSR) - Nuclear Society of Serbia (NSS) - Nuclear Society of Slovenia (DJS) - Nuclear Society of Thailand (NST) - Romanian Nuclear Energy Association (AREN) - Slovak Nuclear Society (SNUS) - Spanish Nuclear Society (SNE) - Swedish Nuclear Society (SKS) - Swiss Nuclear Society (SGK)