

“Future Energy”: Inauguration of ITER Exhibit at the Astana World EXPO-2017

Bernard Bigot, ITER Director-General

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My warmest welcome to all of you, on behalf of the ITER Project and the representatives of the ITER Domestic Agencies from all around the world. We are deeply honoured to have you present, in this beautiful capital city of Astana, for the Inauguration of the ITER Exhibit at World EXPO-2017.

The history of the World EXPO, sometimes called the World Fair, is a history of showcasing remarkable scientific discovery and engineering innovation. One of the most well-known symbols of France, the Eiffel Tower, was built for the 1889 World Fair in Paris, and was considered an absolute engineering marvel.

Four years later, for the World EXPO in Chicago, the United States engineers asked themselves, “How can we build something better than the Eiffel Tower?” They decided, “We will also build a very tall structure, but in the form of a moving circle.” Their result was the Ferris Wheel.

This year, as we have seen, our gracious hosts, the Republic of Kazakhstan, have built the largest spherical building in the world: the 80-metre diameter Kazakh Pavilion.

Thus the history of the World EXPO is one of leading the way to the future.

This year as you know the EXPO theme is “Future Energy.” I cannot imagine any science and engineering project with a greater potential impact on the future than harnessing the power of the sun and the stars: nuclear fusion, a safe and environmentally friendly source of energy with enough fuel here on earth to serve humankind for millions of years.

The effort for humans to harness fusion has been ongoing for more than six decades. But what is unique about this field of science and engineering is that nuclear fusion, from its earliest roots, has been collaborative. Unlike the competitive engineering of the historical EXPOs, the project you are seeing today represents the collective resources—financial, technological, and intellectual—of 35 countries working together.

The Eiffel Tower was named after Gustave Eiffel, the engineer whose company built it. The Ferris Wheel was named after George Ferris, the engineer who invented it.

“ITER” is named for the future that it promises. In Latin, “ITER” means “the way”: the way to a nearly unlimited, safe, clean, sustainable and economically competitive energy. A dream for humanity.

I encourage you to take the time, with our ITER Exhibit, to understand the science, the complexity of the technology challenges, and also the complexity of the partnerships that are designing and building parts of this fantastic machine—the ITER Tokamak—in companies and universities and laboratories around the world.

I also urge you to visit the Chinese exhibit, where they also showcase ITER and fusion, and have created a 4D cinema and an ITER model that is both educational and visually spectacular.

Some of you may have seen the model of the KTM on display, the Kazakhstan Tokamak for Materials studies. Tomorrow, in a ceremony in the Media Centre, the National Nuclear Center of the Republic of Kazakhstan will sign a Cooperation Agreement with ITER, thus becoming our newest collaborator.

I must also mention, on behalf of the ITER Project, our gratitude to our host country, France. The ITER Tokamak is being built in the beautiful region of Provence, in the south of France; and so the Government of France offered us this opportunity to place an international ITER exhibit in the French Pavilion. We are deeply grateful.

To put it simply: the future of fusion—like the future of science—is partnership.

Therefore, this afternoon let me assure you that we are grateful to have so many of you as our partners. I offer my thanks to the Government of France, my warmest wishes to our gracious Kazakh hosts for a beautiful and memorable World EXPO-2017, and my most sincere welcome to all of you as your guests at this inauguration of the ITER Exhibit.