



Address of Pope Francis to the Plenary Assembly of the Pontifical Academy of Sciences

*Dear President, your Eminence,
distinguished Ladies and Gentlemen!*

I offer a warm welcome to the members of the Pontifical Academy of Sciences, and, in a particular way, I greet the new members. Your insights and expertise are very important in the complex world in which we live. I thank the President, Joachim von Braun, and the Chancellor, Cardinal Peter Turkson, and the Academicians for highlighting the issue of *Anthropocene* and *Artificial Intelligence* for study and discussion at this year's Plenary Assembly.

All of us are increasingly troubled by humanity's deep impacts on nature and the earth systems. I have learned that one of you, Paul Crutzen, in describing these impacts on created nature, referred to them collectively as constituting the *Age of the Anthropocene*. Members of your Academy were thus among the first to identify the cumulative impact of human activities on creation and to study its related risks and problems. Indeed, the Anthropocene is revealing its increasingly dramatic consequences for nature and for human beings, especially through the climate crisis and loss in biodiversity.

I am grateful, then, that the Pontifical Academy of Sciences continues to focus concern on issues such as these, not least with regard to their implications for the poor and the disadvantaged. The sciences, in their pursuit of knowledge and understanding of the physical world, must never lose sight of the importance of using that knowledge to serve and enhance the dignity of individuals and humanity as a whole.

As our world faces grave social, political and environmental challenges, we see clearly the need for a larger framework in which inclusive public discourse is not only informed by different scientific disciplines, but also by the participation of all segments of society. In this regard, I welcome and commend highly the Academy's desire to draw attention to marginalized and poor people in its various Conferences, and to include indigenous peoples and their wisdom in its dialogues.

Your Plenary Assembly this year also addresses emerging new science and innovations, and related opportunities for science and planetary health. Here I think particularly of the challenges posed by the progress made in Artificial Intelligence. Such development can prove beneficial to humanity, for instance by advancing innovations in the fields of medicine and health care, as well

as by helping to protect the natural environment and enabling the sustainable use of resources in the light of climate change. Yet, as we realize, it can also have serious negative implications for the general population, especially children and more vulnerable adults. Furthermore, the risks of manipulative applications of Artificial Intelligence for shaping public opinion, influencing consumer choices and interfering with electoral processes need to be acknowledged and prevented.

These challenges remind us of the invariably human and ethical dimensions of all scientific and technological progress. I would express once more, therefore, the Church's concern that "the inherent dignity of each human being and the fraternity that binds us together as members of the one human family must undergird the development of new technologies... Technological developments that do not lead to an improvement in the quality of life of all humanity, but on the contrary aggravate inequalities and conflicts, can never count as true progress" (*Message for the 2024 World Day of Peace*, 2). In this sense, the impact of forms of Artificial Intelligence on individual peoples and the international community calls for greater attention and study. I am pleased to know that the Pontifical Academy of Sciences is working, for its part, to propose appropriate regulations for the sake of preventing risks and encouraging benefits in this complex field.

Dear friends, at a time when crises, wars and threats to world security seem to prevail, your own quiet contributions to the progress of knowledge in the service of our human family are all the more important for the cause of global peace and international cooperation. I thank you for your participation in the work of the Academy and offer you my prayerful good wishes for the deliberations of the present Plenary Assembly. Upon you, your families and all associated with your important work I invoke God's abundant blessings. And I ask you, please, to remember me in your prayers. Thank you.