

Message from the president

This special issue of *Reflets de la physique* is the culmination of a huge project that has involved several years of work by scientists who are undisputed specialists in the energy transition. It looks at the issue from every angle, mainly from a physicist's point of view: what is at stake for mankind, the scale of the challenge of defossilisation, societal aspects, low-carbon sources of electricity, their advantages, limitations and future, impacts on health and the environment, etc. The authors are researchers and engineers from universities and major research bodies, as well as a health specialist and two economists.

This issue follows on from the one on nuclear electricity (*Reflets de la physique* No. 60, published in December 2018), a component that cannot of course be ignored in the energy transition. This issue, which is crucial for our society and often a source of tension and ideological posturing, is approached here with the most neutral view possible, based on known facts and the most realistic modelling of what can be anticipated, in a word on a rigorous scientific approach. It is then up to each and every one of us, on the basis of this body of data, to form a precise idea of the situation and the possible options, in order to exercise our critical faculties and inform our choices or our commitment.

I believe that the SFP is fully fulfilling its role by providing a rigorous basis on the issue of the future of energy use, both for decision-makers, be they politicians or business leaders, and for ordinary citizens who are often at a loss when faced with a profusion of information and, unfortunately, misinformation.

So a huge thank you to all those involved in this great undertaking, to the many authors of course, but also especially to Gérard Bonhomme, the chairman of our Energy and Environment Committee, who coordinated the project, to the members of this committee, and to the *Reflets* editorial committee led by Charles de Novion and Stefano Panebianco. I will not forget the role of my predecessors, Michel Spiro, Catherine Langlais and Guy Wormser, who initiated or supported, but also encouraged in difficult moments, this adventure whose long gestation guarantees an indisputable degree of completion. We can all be proud of this issue, which we hope will serve as a benchmark for many years to come, and deserves to be distributed as widely as possible.

Daniel Rouan

President of the French Physical Society