

Andrew Moore: Energy carriers of the future - What 3.5 billion years of biology can teach us

Earth's entire ecosystem is based on carbon compounds. Nevertheless, many people are currently working to eliminate carbon-based energy carriers from human economies. According to biochemist Andrew Moore, the decarbonization strategy pursued so far is misguided: Electric motors and battery technologies are reaching their limits and are not sustainable in the long run. For a future without fossil fuels, synthetic fuels, so-called e-fuels, could be the solution. Moore is convinced that for a net-zero CO₂ circular economy, they are an indispensable part of the technological diversity that we need to live much more environmentally consciously on this planet. Biology's use of carbon compounds is an enormous lesson in sustainability from which we must learn.

Dr. [Andrew Moore](#) is a freelance scientific author and science communicator. After studying at the University of Cambridge and earning his PhD in biochemistry, molecular biology, and biophysics, he was commissioned by the European Molecular Biology Organization (EMBO) to develop and manage a program for science communication and policy. In this role, he developed many successful programs, including media workshops and educational platforms. Until 2021, he was the Editor-in-Chief of the scientific journal *BioEssays*.