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In 2012, governments worldwide renewed their commitments to a more sustainable development that would eradicate poverty, halt climate change and conserve ecosystems, and initiated a process to create a long-term vision by formulating Sustainable Development Goals (SDGs). Although progress in achieving a more sustainable development has been made in some areas, overall, actions have not been able to bend the trend in critical areas (including those related to the so-called food-water-energy nexus). Here, we analyze how different combinations of technological measures and behavioral changes could contribute to achieving a set of sustainability objectives, taking into account the interlinkages between them. The objectives include eradicating hunger, providing universal access to modern energy, preventing dangerous climate change, conserving biodiversity and controlling air pollution. The analysis identifies different pathways that achieve these objectives simultaneously, but they all require substantial transformations in the energy and food systems, that go far beyond historic progress and currently formulated policies. The analysis also shows synergies and trade-offs between achieving the different objectives, concluding that achieving them requires a comprehensive approach. The scenario analysis does not point at a fundamental trade-off between the objectives related to poverty eradication and those related to environmental sustainability. The different pathways of achieving the set of long-term objectives and their implications for short-term action can contribute to building a comprehensive strategy to meet the SDGs by proposing near-term actions.

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