## For a Sustainable Future of Communications and Networking

The emergency related to climate changes and unprecedented increase of inequalities is pushing sustainability in the agenda of international and national organizations. By shaping the future, research and innovation play a fundamental role in tackling these challenges, especially in those sectors, like Information and Communication Technologies (ICT), that are drivers of economical growth.

In this talk, we first provide some data to understand sustainability issues in the ICT sector. We then discuss possible research directions and challenges. Finally, we present some solutions based on the integration of energy and resource management. As a case study, we investigate the effectiveness of mobile network operation solutions based on device sleep modes combined with machine learning approaches for traffic and energy prediction.



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learning for video quality of experience. She edited a book Green Communications (Wiley) and several special issues of international journals. She chairs the International Advisory Council of the International Teletraffic Conference. She is a Senior Editor of IEEE Transactions on Green Communications and was an Associate Editor of ACM/IEEE Transactions on Networking, Green Series

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