

UNIVERSITY OF THESSALY
School of Engineering - Department of Civil Engineering

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The nexus roads-windfarms-biodiversity under the light of
sustainable spatial planning

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Wednesday **15/12/2021**, Time: **11:00**

Webinar: [Microsoft Teams](#)

Live Streaming: [DIAVLOS](#) and [YouTube](#)

Abstract:

Humanity depends directly on biodiversity and its services but we currently face both a biodiversity and a climate crisis. The lecture will focus on two topical issues: (a) Road sprawl is a key driver behind biodiversity loss. We suggest a new national and European roadless policy towards the non net-land take milestone. We present the roadless map of Greece, and we suggest the conservation in legal terms of large roadless areas as ecosystems of high natural, ecological and aesthetic value. The Greek prime minister announced the conservation of roadless areas in the world summit COP26 under the emblematic title "Untrodden Mountains". (b) Aeolian energy is the leading renewable energy source. However, we often face the paradox of impacting on biodiversity to combat climate change. We present a novel method of spatial planning that enhances windfarm sustainability: investments are prioritized in the most fragmented zones that lie outside the Natura 2000 network of protected areas. The suggested investment zone supports wind harnessing 1.5 times higher than the 2030 national goal, having only marginally lower (4%) wind speed. The sustainable scenario provides significant benefits to biodiversity and society. It is not known if the sustainable scenario will be integrated in the forthcoming national spatial planning for renewables. More info [here](#) and [here](#).

