

"National Wealth Through Eco-Technologies: Green Gold or Fool's Gold?"  
(joint with G. Perino)

Abstract: 'Green' innovations can earn significant intellectual property rents for their developers when adopted on a global scale. Many OECD countries have embraced the notion that this 'green gold' of eco-technologies can make cuts in emissions of global pollutants economically less painful or even painless for technological first movers. Here, we examine whether countries should pursue 'green gold' in a world of global pollution problems or whether this strategy can backfire. To do so, we compare the features of international environmental agreements in terms of global abatement and welfare in two different settings: In one, the innovator extracts the innovation rents. In the other, the innovator gives the technology away for free. The results are subtle: In both cases, innovation is globally beneficial. However, the presence of a rent extracting innovator changes the incentives for other countries to commit to abatement for strategic reasons. Global abatement decreases and IEAs now assume the function of a technology demand side cartel: Signatories may abate less than non-signatories. The country hosting the innovator may end up worse off than giving the technology away for free, in particular for more innovative technologies.