# Possible academic cooperation with NRERC - Natural Resources and Environmental Research Center, University of Haifa

## Climate Change

1. Analysis of climate change taxation implications on national economies
2. Impact of climate change on financial markets (insurance)
3. Climate change impacts on ecosystem services, analyzed in case studies such as Carmel Biosphere Reserve, coastal zones, arid zones
4. Climate change impacts on waste: emerging evidences that climate change will cause to higher waste production due to the decline in food quality and nutrition as well as increased rate of decay (FAO, 2011)
5. Climate change impacts on coastal municipalities. About 57% of Israel's population lives in the coastal plain. In addition, major conventional power plants are located on shore. The forum of 22 coastal municipalities can provide data for case studies
6. Israel as a small open coastal economy can serve a case study for methodology of adaptation to climate change

## Water Resources

7. The Dead Sea as a representative case study for the irreversible impact on natural water sources caused by human activities. The case study can be analyzed in the view of potential extreme climate changes
8. Water resource benefits: secondary water sources are in use to overcome the shortage in natural fresh water supply. The integration into CGE modeling can provide quantitative analysis of best practices and management of multiple sources as well as analysis of impact on food security
9. Desalination as a possible measure for conflict resolution induced by climate change
10. Optimal use of water quality gradient in agricultural production

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## Energy Resources

11. Efficiency analyses in electricity use,
12. developing of efficiency and sustainability indicators in energy sectors
13. "Smart" electricity networks
14. The macroeconomic impact of decarbonized electricity generation. Specifically, what is the unemployment impact in the economy without conventional power plants
15. Israel, Egypt and Cyprus had major discoveries of natural gas offshore. How the observed de-carbonization through the change in fossil fuel mix from oil and coal to gas effects climate change planning? Are we on the sustainability path?
16. Green buildings and power efficiency in town planning

## Marine ecosystem services

17. Economic Valuation of Marine Ecosystem services, with a focus on the Mediterranean (Pollution abatement, Carbon sequestration, Biological control, Recreation benefits, Natural Gas industry, Fishing Industry, Sports fishing, Coastal protection)

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