

TO WHOM IT MAY CONCERN

RE: The review of a post-gradual doctoral thesis „**A design of pilot emission trading scheme for Turkey under evolution of global climate regime**“ submitted by

Fariz Tasdan, B.Sc., M.A.

The topic of the submitted thesis is of a high interest and very up-to-date not only in the relation to the economy of Turkey. The problem of a gradual increasing concentration of carbon in a global atmosphere concerns the world economy as a whole. The sustainable low-carbon development seems to be the only possibility how to dare the considerably negative environmental and economic losses brought about by the ongoing change of climate and mankind cannot afford to neglect its severe social impacts on developing countries, in particular. The observed present increasing occurrence of climate extremes inevitably imperils the very existence of mankind.

The objectives of the research carried out are explicitly and clearly formulated in Chapter 2. These objectives are ambitious and consist of the proposal of a pilot emission trading scheme for Turkey based on the benchmarking of emissions and the auctioning of allowances including its linking to a voluntary carbon market. As the experimental subject of a research the fossil fuel electricity sector has been selected

The thorough analysis of both the present state and problems concerning the carbon trading evolution from the global point of view and the solutions of these problems on the level of particular developed and developing countries has been elaborated carefully and serves as a good starting point for the assumed establishment and strengthening the emission market in Turkey. The text contains citations of 114 publications written by authors from Turkey and abroad what helps author himself to select an efficient methodology for approaching the mentioned scientific objectives.

The applied methods of research include the Kaya identity for both the measurement and forecasting industrial emissions of the Turkish fossil fuel electricity sector under the given specific conditions together with the methodological tools of the United Nations Framework Convention on Climate Change. Author has formulated two working hypotheses. The first of them assumes that the benchmarking method leads to a required reduction of industrial emissions. The second of them assumes the full operability of the proposed emission trading system as an efficient tool for both the increasing state treasury income and offsetting the emissions, as well. The applied procedure of measuring the economic effects of the assumed intensification concerning the fossil fuel electricity sector is correct and enabled to provide several evidences confirming the validity of both mentioned hypotheses. However, in my opinion, the benchmarks offered for the fossil fuel electricity sector proposed at annual rate of emission reduction approaching the applied 5 % under the conditions of Turkish economy are rather tough.

The list of publications written by the author points out his real interest and a rich experience in the carbon trading policy research. This list contains 8 original scientific papers published both in Turkey and several countries of the European Union.

The formal outline of a thesis and the arrangements of its particular chapters are on the acceptable levels. However, the text of a thesis contains numerous petty grammatical mistakes that could have been removed by a simple application of a language corrector. Here is presented the list of some of them:

p. 3, 6. row from a bottom: Not “...sisters who has been always with my...”, but correctly “...sisters who have been always with me...”.

- p. 4, 14. row from a top: Instead of a pronoun "she" used for Turkey, there would have been more convenient English "it".
- p. 13, 1. row at a top: The adjective "Human" would have better been replaced by a noun "Mankind".
- p. 14, 16. row from a top: China belongs among the industrially most developed countries. Why is China classified as a developing country?
13. row from a bottom: The incorrect adjective "formulized" would have better been replaced by an adjective "formulated".
- The cited publication of Kaya (14) presented in the Bibliography lacks the information about the number of pages.
- p. 15, Paragraph 1. The second sentence lacks a full stop at its end.
- p. 19, 6. row from a bottom: Not "...carbon markets has reached...", but correctly "...carbon markets have reached...".
- p. 20, 11. row from a bottom: Not "...on worldwide there eight...", but correctly "...on worldwide there are eight...".
- p. 21, 5. row from a top: Not "...was works...", but correctly "...were works...".
- p. 22: The question "What is the best way for Turkey to introduce an emission trading scheme in its own economy and benefit from that?" is repeatedly presented in this page for 2 times. This is an inconvenient redundancy of information in a text.
- p. 23, 3. row from a bottom: Not "...on policy stand of Turkey...", would have better been replaced by "...on the policy attitude of Turkey...".
- p. 34, 15. row from a top: Not "Main forces...is based...", but correctly "Main forces...are based...".
- p. 41, 11. row from a top: Not "Pursing a rapid development path...", but correctly "Pursuing a rapid development path...".
- p. 56, 7. row from a top: The noun "experience" does not have a plural in English.
- p. 73, 2. row from a top: There is probably omitted a correct reference to a bibliography in this sentence.
5. row from a bottom: Not "stabile", but correctly "stable".
- p. 75, 7. row from a bottom: Not "...has be done...", but correctly "...has to be done...".
- p. 82, 11. row from a bottom: Not "...while it analyse the impact...", but correctly "...while it analyses the impact...".
- p. 86: The whole Table 9 should have been printed in one page.

The results of a submitted thesis point out the correctly proposed emission trading scheme for the conditions of Turkish economy and its successful application on the example of its fossil fuel electricity sector. The new emission trading scheme seems to be an acceptable efficient solution for the assumed decreasing the GHG emissions from non-renewable fossil fuels. These results enlarge our knowledge about possibilities of emission trading markets development within the electricity sector of developing countries. This is the main theoretical contribution of the author to the art of environmental economics.

In spite of the global carbon market collapse, the United Nations undoubtedly will have to continue negotiations about the second and next commitments of the Kyoto Protocol. There is no other possibility for the human society to survive than to maintain a global climate unchanged in order to provide conditions necessary to produce enough agricultural products for the whole human population and so assert the paradigm of a sustainable development theory in practice.

However, it would be pertinent, if the author during a dissertation answers the following questions:

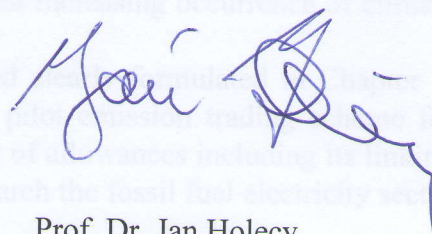
1. The total of transactioned volume amounts depicted in Figure 3 equals only to 310 Million AAUs instead of 314 Million AAUs as it is presented in the text. Is there any sensible explanation of this difference?
2. For what purposes will be spent the assumed amounts collected for an extra emissions of CO₂?

3. Is there any possibility to complete the cycle of a carbon trading in Turkey by supporting the sequestration of carbon by the afforestation of large deserted areas of landscape?

Conclusion:

The most of my comments concerns the formal matters and arrangements of a text only. They do not decrease the value of obtained results. In my opinion the objectives of a thesis have been successfully approached. The great part of the obtained results has already been published by the author in collaboration with other researchers. Based on the described results presented in the text of a thesis and after a successful dissertation concerning the all presented questions I recommend the author to be awarded by the scientific degree:

“Philosophiae Doctor (Ph.D.)”.



Zvolen, 24th June, 2013

Prof. Dr. Jan Holecý