

Impact Factor: 3.4546 (UIF) DRJI Value: 5.9 (B+)

# The Evaluation of Stakeholder Participation of Projects Developed in Turkey and Certified in Voluntary Carbon Markets\*

Dr. FERHAN CAN

#### Abstract:

Carbon markets, which is established to decrease the cost of fight against the climate change, is divided into two as compliance and voluntary carbon markets. Turkey has benefitted only from voluntary carbon markets, which operates like compliance markets but independent from it, instead of compliance carbon markets flexible mechanism.

Participation, responsibility and transparency are the basis of a strong environment policies and it is pointed out that "lack of participation" is the important problem of environment policies. The aim of this study is to reveal whether stakeholder participation is implemented in projects properly or not in voluntary carbon markets in Turkey and to suggest about practices. To reach this aim, related projects files, were acquired from Markit (Financial Information System), were investigated according to Evaluation Template. As a result of the study we can state that, stakeholder participation procedure works according to the rules however its effect on the process is very little, which generates similar outputs to results of the studies in the world. Understanding and improving weaknesses of stakeholder participation, that is a kind of learning process, is good for all because stakeholder participation is an important component of good governance.

<sup>\*</sup> This study is an English translation by the author of a Turkish paper in the Journal of Research in Economics, Politics & Finance in Turkey (Journal of Research in Economics, Politics & Finance, 2018, 3(1): 1-17 DOI:10.30784/epfad.408988).

**Key words:** Climate Change, Voluntary Carbon Market, Stakeholder Participation, Turkey, Clean Development Mechanism

#### 1. INTRODUCTION

The carbon market is a form of market that is created for trading of carbon emission allowances which is acquired in return for reduction of greenhouse gas (REC Türkiye, 2015: 137). Carbon market is working as a stock exchange market in which carbon emission allowances or credits are traded for reach emission reduction target and for profit.

The carbon market is divided into two. First one is the compliance carbon markets in which countries use three Flexibility Mechanism defined in the Kyoto Protocol for achieving compliance with their quantified emissions reduction commitments with lower cost. Second one is the voluntary carbon markets in which people, institutions, companies, nongovernmental organizations are voluntarily reduce their greenhouse gas emission which is produced from their activities (Narin, 2013: 946).

Before understanding projects developed in Turkey for reducing greenhouse gas emission, we should understand compliance carbon markets. Projects implemented for reducing emission in developing countries are performed under the name of Clean Development Mechanism in compliance markets and within the framework of Kyoto Protocol. However, projects developed in voluntary carbon markets are named Clean Development Mechanism-like projects and use different standards which is improved especially for voluntary carbon markets does not operate within the framework of Kyoto Protocol.

Clean Development Mechanism (CDM) is aimed to assist developed countries in achieving compliance with their quantified emissions reduction commitments with lower cost and to assist developing countries in achieving sustainable development. Stakeholder participation is one of the important tools of Clean Development Mechanism which is used to reach its aim. According to debates about global governance, "stakeholder participation" is named from top-down steering to informal, bottom-up and voluntary approaches.

"Public participation" is recognized as a key principle for effective climate governance in Articles 4 and 6 of the United Nations Framework Convention on Climate Change (UNFCCC). According to Agenda 21, the Rio Declaration on Environment and Development, and the Aarhus Convention, stakeholder participation is also recognized as a right and a means to ensure good governance, transparency, integrity, and sustainable development, as well as to prevent human rights violations (Dong, 2014: 2).

The "public" refers here to a broad group of stakeholders, including individuals and families living near the project, indigenous groups, religious groups, public sector officials, private sector companies, and NGOs at the local, national, and international level. These individuals or groups may be directly or indirectly affected by, or otherwise have an interest in, project activities. The "stakeholder participation" refers to access to information, engagement in decision-making, and access to judicial redress. The Rio Declaration and the Aarhus Convention elaborated the following three rights of the public (Baumert, Petkova, 2000: 1-2).

In international publications, there are studies about the evaluation of stakeholder participation process in compliance carbon markets. According to these studies, usually the process of stakeholder participation is implemented in formally however in practice, it is not given enough importance to the stakeholders views. Because of these results, in international publications, stakeholder participation in compliance carbon markets are discussed regarding changes that need to be done.

Turkish companies operating in the voluntary carbon should be examined in terms of stakeholder participation practices and detected shortcomings must be because the development ofeliminated. stakeholder participation is important for the development of democracy and the prevention of human rights violations. In some standards which are generated for voluntary carbon markets, for example Gold Standard<sup>1</sup>, it is emphasized that stakeholder participation are applied better. Most of the companies in Turkey have worked with Gold Standard. Therefore, review and evaluation of stakeholder participation process of this standard will be useful.

According to data from the Ministry of Environment and Urbanization, between the years of 2005 and 2014, Turkey is hosted a total of 308 project-based emission reduction activities. Project files, necessary for this study, are not obtained from the Ministry, but obtained from the financial information system named Markit in which projects who want to operate in voluntary carbon markets take in. According to this system, total 327 projects applied for certificates that can be traded in the voluntary carbon markets from Turkey as of May 2016. 66 of applied projects using the gold standard in which stakeholder participation processes are implemented. have been awarded a certificate. Files related with stakeholder participation of 42 projects from 66 projects have been reached. In line with the Evaluation Template developed for this study. these files were examined in terms of stakeholder participation and research findings were evaluated and recommendations were made.

<sup>&</sup>lt;sup>1</sup> Gold Standard: It is an international standard for the certification of

carbon offsetting projects and carbon credits in the voluntary carbon markets. Environmental and social benefits of projects are particularly taken into account.

### 2. CARBON MARKETS

In the fight against climate change, in Annex-B list in which emissions reduction targets have been set for each country listed in Annex-I<sup>2</sup> of the Kyoto Protocol. The Protocol defines flexibility mechanisms to facilitate access to reduction targets. These mechanisms, known as Emissions Trading, Joint Implementation and Clean Development Mechanism, have been introduced because of the excessive cost of activities to combat climate change.(TUBA, 2010: 79). The effect of greenhouse gas emissions on climate change is the same all over the world, but the emission reduction costs are different. Countries that have obligations, primarily engage in efforts to reduce greenhouse gas emissions within their own borders, in addition to these efforts, also benefit from market mechanisms in order to fulfill their obligations. In other words, flexibility mechanisms are mechanisms that have complementary qualities.

The Clean Development Mechanism, which covers not all climate projects, but only projects within the context of the Kyoto Protocol, is regulated by the Protocol's 12th article. A country in the Annex-B list may invest in non-Annex-I³ countries which does not have a greenhouse gas emission reduction obligation. When emission reduction is provided at the end of the project, the host receives Certified Emission Reduction Credits. The investor who obtains these credits can either purchase the right to release greenhouse gas as much as the amount of the credits he receives or sell these credits in the carbon market. The aim is to help developed countries fulfill

\_

<sup>&</sup>lt;sup>2</sup> Annex I: Industrialized countries with historical responsibility for greenhouse gas emissions. These are EU member states, OECD member states and non-EU countries in 1990, Central and Eastern European countries, including Russia and Ukraine (REC Turkey, 2015).

<sup>&</sup>lt;sup>3</sup>Non-Annex I: Countries without mitigation and financial liability obligations. These countries are parties to the Convention, include a wide variety of the least developed countries of Africa and the Pacific, developing countries such as China, India, Mexico, and the oil-rich Middle East Middle Eastern countries (REC Turkey, 2015).

their obligations and to ensure that developing countries achieve their sustainable development goals.

CDM projects are on a voluntary basis and including stakeholder participation, but the subject of whether or not they have achieved their goals is discussed. It is important to examine the CDM projects in terms of participation, because in the 6th article of the Paris Agreement which was signed at the 21st Conference of the Parties in 2015, will take effect after 2020, the new mechanism to be applied will be similar to the CDM, even though the name of the CDM is not mentioned in the article. Instead, in the 6th article of the Agreement, three new mechanisms have been introduced on climate policy, two of which are market based approaches, and one is non-market based approach, and by 2020, it is stated that the rules and processes of the new mechanisms specified in the article six will be established.

The first mechanism defined in the Paris Agreement is the cooperation approach that allows the integration of emission trading systems. Second one is the new mechanism that will replace the Kyoto Flexibility Mechanisms, which will contribute to the reduction of greenhouse gas emissions and support sustainable development. Third, it is a non-market based mechanism that envisages a unified, integrated and balanced non-market approach (Paris Agreement, 2015: 7-8).

The second market-based mechanism is similar to the Clean Development Mechanism in the Kyoto Protocol and is defined as the mechanism that "contributes to greenhouse gas emission reduction and support for sustainable development". The difference is that without going to the developed and developing country, all the countries that are parties will be able to invest in mitigation activities. Thus, the market mechanism will be able to spread to a wider area. It is therefore clear that further participation is needed to reduce problems.

Turkey ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 2004 and the Kyoto Protocol in 2009. Turkey is not able to benefit from the flexibility mechanisms in the compliance carbon markets because it is included in the Annex - I list of the Convention but is not included in the Annex-B list of the Protocol. Turkey operates in voluntary markets, which are outside of compliance markets and function independently but operates like the compliance market.

Turkey has accelerated its efforts to close the gap with other countries in the process of climate change policy making. In the context of the fight against climate change, some mitigation measures have taken precedence over others. Carbon trading is perceived as the most important reduction option by the state. In particular, progress has been made on the registration of voluntary carbon reduction projects, on the measurement, reporting and verification of greenhouse gas emissions, on the preparation of a possible carbon market, and on the development of institutional capacity. In 2011, he signed the PMR (Partnership for Market Readiness) project with the World Bank. The Strategy and Action Plans set targets for the establishment of the carbon market. The EU acquise puts carbon trading in front of Turkey (Gündoğan, 2015).

#### 3. THE VOLUNTARY CARBON MARKET IN TURKEY

Since 2005, Turkey has been hosting projects where certificates have been traded in voluntary carbon markets. Voluntary carbon markets have a small percentage of the world carbon markets. However, it contributes to the reduction of greenhouse gas emissions by using it as an environmental and social responsibility tool for individuals and organizations who want to balance the greenhouse gas emissions which are created within the framework of their activities. Entering the voluntary carbon markets, Turkey will be able to use its experience in the compliance carbon markets that will be created later.

Between 2005 and 2014, Turkey hosted a total of 308 project-based emissions reduction activities. Among these activities, renewable energy projects take the first place. Then the waste utilization projects to produce energy and energy efficiency projects are coming. The number of projects developed in voluntary carbon markets in Turkey, the type of projects and the amount of greenhouse gas reduction reached are shown in Table 1. Only 18% of the projects stated in the table have been certified as of 2012 (REC Türkiye, 2015: 150).

Table 1: Sectoral Distribution of Projects Developed in Voluntary Carbon Markets in Turkey (as of 18.04.2014).

| Project Types                   | Number   | Annual Emission Reduction     |
|---------------------------------|----------|-------------------------------|
|                                 | of       | (tons CO <sub>2</sub> / year) |
|                                 | Projects |                               |
| Hydroelectric Power Plant       | 159      | 8.747.634                     |
| Wind Power Plant                | 156      | 7.951.391                     |
| Production Of Energy From Waste | 27       | 3.069.273                     |
| / Biogas                        | 21       | 3.009.273                     |
| Energy Efficiency               | 10       | 432.081                       |
| Geothermal                      | 6        | 405.309                       |
| Total                           | 308      | 20.605.688                    |

Source: Ministry of Environment and Urbanism, 2016

Turkey's hosted projects for voluntary carbon markets are similar to the Clean Development Mechanism from the Kyoto Protocol flexibility mechanisms. Unlike the Kyoto Protocol mechanism, there is no mandatory standard in voluntary markets. Instead, different standards are required by different buyers (Konak, 2011:170).

The most preferred standard in voluntary carbon markets is the Gold Standard (GS). Many projects in Turkey use the Gold Standard. Projects developed in accordance with the Voluntary Carbon Standard (VCS) and Verified Emission Reduction (VER+) standards are also available. The cycle of a project developed for voluntary markets is very similar to the cycles of projects that are traded in the compliance markets (Çevre ve Şehircilik Bakanlığı, Ekim 2012).

The emission market in Turkey consists only of foreign buyers. While most of the seller in Turkey are energy companies, the largest buyers of carbon certificates are airline companies such as Virgin Atlantic, Air France, British Airways and Cathay Pacific, or companies such as Google, DHL, Swisspost, Nokia, Panasonic from abroad (Atılal, 2016). In voluntary carbon markets, prices vary based on project. While the Gold Standard VER prices for wind energy projects in Turkey are \$ 11- 12, this price is around \$ 2,5- 3 for VCRs (Ecer, 2010). The Gold Standard has a higher market value because of having similarity with CDM projects in compliance markets and perhaps having more challenging rules (Colomb, 2009: 49).

Gold Standard is a Swiss-based and organization. It was developed by the World Wide Fund for Nature (WWF) in 2003 to introduce benchmark applications for energy projects developed under the United Nations Clean Development Mechanism. It is currently supported by more than 80 non-governmental organizations around the world. It is a guide for projects and investors aiming at real emission reduction and long-term sustainable development in voluntary carbon markets. Social and environmental benefits of projects are taken into account in particular. It is interested in projects renewable energy, energy efficiency, management, land and forest use. In addition to that, additionality and the sustainability of the projects must be proven. To register the project, the approval of an independent third party is required. It is known as voluntary standards which has the most stringent quality criteria. (Colomb, 2009: 49)

The Voluntary Carbon Standard is a Swiss-based and non-profit standard published in 2006. It is applied internationally by the International Trade Association (IETA) and the World Bank (WB). It focuses on projects which are reducing greenhouse gas emissions, but projects are not

required to provide additional environmental or social benefits. In order to improve overall quality of projects, subcontractors can be used in tasks, and no independent third party approval is required for these projects. For this reason, verification and approval of projects are more cost-effective (Colomb, 2009: 49). Stakeholder participation has an important role in Gold Standard. In this standard a process has been defined for stakeholder involvement. Such a process is not defined in VCS. That's why, only the stakeholder participation process of Gold Standard will be examined and projects implementing this standard will be studied in Turkey. The Gold Standard stakeholder participation process implemented in the projects can be summarized as follows (Standardsmap, 2016));

- Once the account is opened on the Gold Standard web page, The Gold Standard Passport file is written as a ready-made template. This file is prepared in the form of a summary, which will be used for invitations to be sent for the participation of the local stakeholder, in a language which he / she understands in the nonprofessional.
- The two-step local stakeholder participation process is planned. Individual invitation letter is sent to NGOs, national, regional and local politicians for the first step of the face-to-face meeting. For the local people, the text of the public invitation is prepared and the advertisement is published in newspapers. During the meeting, the project is told, the participants 'opinions are taken and the evaluation forms are asked to be filled in. Those who cannot attend the meeting are then sent the necessary information. Their views are also taken.
- After the meeting, the Local Stakeholder Consultation Report prepared by Gold Standard is completed and submitted for registration. If it is seen as an acceptable project, it is announced and published as a candidate project to Gold Standard.

- The Project Design Document is prepared and the Gold Standard Passport is updated in line with the opinions received from the stakeholders.
- The second step of stakeholder participation is called Stakeholder Feedback Round (SFR). In this step, what was made for stakeholder opinions at the first meeting is shown and additional opinions are taken. During the feedback process, Local Stakeholder Consultation Report, Project Design Document and Gold Standard Passport file are made publicly available for 60 days.
- Within the process of feedback, the project can be reviewed and approved by registered bodies of the United Nations. Thus stakeholder opinions are included in the approval process.
- The project is then confirmed by the United Nations registered organizations. The Gold Standard Secretariat, Technical Committee and NGOs examine the project during both the approval and verification phase. Finally, the carbon certificate is issued for the accepted project.

Local Stakeholder Consultation Report consists of the following topics (Ençev, 2009):

- Project description,
- Design of stakeholder consultation process,
- Consultation process,
- Sustainable development assessment,
- Discussion on sustainability monitoring plan,
- Description of stakeholder feedback round,
- Annex 1. Original participants list
- Annex 2. Original feedback forms

The main part of the Project Design Document includes Stakeholders' comments section, and the attachments include contact information on participants in the project activity and the list of invited guests to the primary stakeholder consultation.

The Stakeholders' comments section consists of the following topics (Zoren, 2006);

- Brief description how comments by local stakeholders have been invited and compiled,
- Summary of the comments received,
- Report on how due account was taken of any comments received.

According to the report "National Experience in Carbon Markets and Future Outlook" prepared by the Ministry of Environment and Forestry in 2011, it is stated that women almost never attend stakeholder meetings in Turkey, but women's participation for Gold Standard is important. Stakeholder meetings are either attended by the public or to react, so NGOs such as Greenpeace are required to contribute by participating in these meetings or by expressing opinions. It is also stated that stakeholder meetings after license and construction permits are not effective and difficult to meet the demands of organizations such as Gold Standard (Ministry of Environment and Forestry, 2011: 55).

For example, for wind power plants in Bodrum, it is stated that after obtaining permissions and expropriations, to obtain Gold Standard certificate, opinions from stakeholders were rigidly collected signatures and were collected (Change.org, 2016). It is stated that when this situation is reported to the Gold Standard Foundation, the necessary will be carried out (Kuzevormanları, actions Environmental Impact Assessment is not required for wind power plants in Karaburun and production licenses have been granted and part of the construction has been started. However, due to the opposition of the local population, the three projects here are not included in the Gold Standard processes (Karaburunkentkonsesi, 2013).

As we can see, Gold Standard has planned the stakeholder participation process in detail. But more important than planning is to follow the process and consider feedback. As a result of stakeholder feedback, gold standard does not include relevant projects in its process.

In this study, whether or not the stakeholder participation process of the most widely used Gold Standard operating in voluntary carbon markets in Turkey serves its objectives will be questioned. It is hoped that the results will be used and guided in order to improve stakeholder participation processes.

#### 4. THE RESEARCH METHOD

There is no mandatory standard in voluntary carbon markets. Instead, different standards demanded by different buyers have been formed. Organizations developing projects for voluntary markets in Turkey use Gold Standard and Verified Carbon Standard. As of May 2016, 245 Gold Standard and 82 Verified Carbon Standard of total 327 projects in the Financial Information System named Markit, which includes projects that want to operate in voluntary carbon markets, applied for certificates that can be traded in voluntary markets from Turkey. 66 applicants for Gold Standard and 76 applicants for Verified Carbon Standard have been granted a certificate. 142 projects in Turkey have certificates that can be traded in voluntary carbon markets. Other institutions continue to work at different stages of the application. Table 2 shows the sectors in which the applications are made and the phase of the project cycle (Markit, Financial Information Services Registry, 2016).

Table 2: Distribution of Projects Developed in Voluntary Carbon Markets in Turkey by Standards, Sectors and Phases of the Project Cycle (as of 23.05.2016).

| Sectors                            | GS  | Issued | Registered | Listed | Validated | vcs | Active | Under Validation | Uncertainty | Total |
|------------------------------------|-----|--------|------------|--------|-----------|-----|--------|------------------|-------------|-------|
| Wind                               | 123 | 46     | 26         | 40     | 11        |     |        |                  |             | 123   |
| Other                              | 11  | 7      | 2          | 1      | 1         |     |        |                  |             | 11    |
| Goethermal                         | 8   | 2      | 2          | 4      |           |     |        |                  |             | 8     |
| Hydroelectric                      | 73  | 8      | 24         | 19     | 22        |     |        |                  |             | 73    |
| Energy Industries - renewable/non- |     |        |            |        |           |     |        |                  |             |       |
| renewable sources                  |     |        |            |        |           | 46  | 43     | 2                | 1           | 46    |
| Biyogas – Electricity              | 12  | 1      | 3          | 6      | 2         |     |        |                  |             | 12    |
| Energy Efficiency – Industrial     | 3   |        |            | 2      | 1         |     |        |                  |             | 3     |
| Energy Efficiency                  |     |        |            |        |           | 2   | 2      |                  |             | 2     |
| Renewable Energy                   |     |        |            |        |           | 31  | 28     | 3                |             | 31    |
| Biomass                            | 2   |        |            | 2      |           |     |        |                  |             | 2     |
| Transport                          |     |        |            |        |           | 1   | 1      |                  |             | 1     |
| Biogas - Cogeneration              | 8   | 1      | 2          | 3      | 2         |     |        |                  |             | 8     |
| Manufacturing Industries           |     |        |            |        |           | 2   | 2      |                  |             | 2     |
| Low-Impact Hydro                   | 1   |        |            |        | 1         |     |        |                  |             | 1     |
| Biogas – Heat                      | 1   |        | 1          |        |           |     |        |                  |             | 1     |
| Hydro                              | 1   |        | 1          |        |           |     |        |                  |             | 1     |
| PV                                 | 1   | 1      |            |        |           |     |        |                  |             | 1     |
| Energy Efficiency – Domestic       | 1   |        | 1          |        |           |     |        |                  |             | 1     |
|                                    | 245 | 66     | 62         | 77     | 40        | 82  | 76     | 5                | 1           | 327   |

**Source:** Markit, Financial Information Services, 2016 (This table is created by the author of the article using the information on the web page.)

Gold Standard has been the subject of the study because it has examined the social and environmental impacts of the project and has given importance to stakeholder participation. Of the 245 applications made from Turkey, 66 of them have been qualified to receive certificates. 66 Local Stakeholder Consultation Report, Gold Standard Passport and Project Design Document of the projects were considered appropriate to be discussed in the study. Among these, the Local Stakeholder Consultation Report is the most widely accessed file. However, only 42 Local Stakeholder Consultation Report have been

reached. The same information could not be reached because of the difference in version in these files.

28 of the 42 projects studied in terms of stakeholder participation are wind power plants, six hydro power plants, six of which are named others as solid waste in Table 2, one of which is geothermal and one of which is biogas projects. The files of these projects are examined in accordance with the Evaluation Template shown in Table 3. This Evaluation Template was inspired by Yan Dong's (2014) article. In addition to stakeholder participation, it was also examined whether these projects were implemented in which cities, in which years stakeholder participation meetings were held, their capacities, greenhouse gas emission reductions and technology were transferred. Review results are discussed in the next section.

Table 3: Evaluation Template for Analysis of Stakeholder Participation Process

| Stakeholder               | Template   | Assessment Indicators  |
|---------------------------|--|--|
| Participation             | Template   | rissessment indicators   |
| Process                   |  |  |
| Stakeholders              | Stakeholders invited<br>to the meeting and<br>their number | The stakeholders that should be invited in Gold Standard have been identified. |
|                           | Stakeholders<br>attended to the                            | Local people     Local government  |
|                           | meeting and their  | 3. Central government  |
|                           | number   | 4. Related enterprise  |
|                           |  | 5. Consultant firm 6. Gold Standard's NGO                                      |
|                           | Stakeholders   | 7. Other NGO 1. Gender   |
|                           | represented.   | 2. Education level   |
|                           |  | 3. Age<br>4. Occupation  |
| Participatory<br>approach | Method used for stakeholder                                | Defined in the Gold Standard.  |
|                           | participation.   |  |
|                           | Explanation of the project to the participants.            | Defined in the Gold Standard.  |
|                           | Timing of  | Defined in the Gold Standard.  |

Ferhan Can- The Evaluation of Stakeholder Participation of Projects Developed in Turkey and Certified in Voluntary Carbon Markets

|                 | participants to be involved in the process. |   |  |  |  |
|-----------------|---|---|--|--|--|
|                 | Is the process organized                    | The process of the Gold Standard is organized by project owner. |  |  |  |
|                 | independently?                              |   |  |  |  |
|                 | The transparency of                         | The publication of the invitation, the                          |  |  |  |
|                 | the process.                                | transparency of the participation                               |  |  |  |
|                 |   | process and the publication of the                              |  |  |  |
|                 |   | results are defined in Gold Standard.                           |  |  |  |
| Decision-making | Stakeholders' views                         | 1. Economic   |  |  |  |
|                 |   | 2. Social   |  |  |  |
|                 |   | 3. Environmental  |  |  |  |
|                 | The degree of                               | The project proposal is evaluated                               |  |  |  |
|                 | stakeholder opinions                        | according to whether it has been                                |  |  |  |
|                 | affecting decisions.                        | changed or not considering the public                           |  |  |  |
|                 |   | opinion.  |  |  |  |
|                 | Feedback meeting.                           | In the Feedback process, it evaluates                           |  |  |  |
|                 |   | whether or not stakeholders report their                        |  |  |  |
|                 |   | views.  |  |  |  |
|                 | Complaint                                   | The complaint mechanism is evaluated                            |  |  |  |
|                 | mechanism.                                  | according to whether or not it is used.                         |  |  |  |
|                 | Stakeholders' views                         | 1. Economic   |  |  |  |
|                 | on Sustainable                              | 2. Social   |  |  |  |
|                 | Development.                                | 3. Environmental  |  |  |  |

**Source:** Dong, 2014: 7-8 (This template was prepared by the author of the article, inspired by the relevant article.)

#### 5. RESEARCH FINDINGS

The access files of 42 projects implemented in Turkey and awarded carbon certificates by Gold Standard have been examined in terms of stakeholder participation. Before proceeding to the results of the stakeholder participation reviews, other information about the projects can be summarized as follows in accordance with the datas shown in Table 4. 13 of the projects were carried out in Marmara region, 12 in Aegean region, 7 in Black Sea region, 6 in Mediterranean and 4 in Central Anatolia region. The project participation meeting of one of these projects was held in 2007, 15 in 2008, 11 in 2009, 11 in 2010, 2 in 2011 and 1 in 2012. As we have seen, 60% of the projects were carried out in the Marmara and

Aegean region and 88% of stakeholder participation meetings were held in 2008, 2009 and 2010.

17 of the projects are 0-15MW capacity (small scale), 14 15-30MW capacity (medium scale) and 11 of them are projects with over 30MW capacity (large scale). The total capacity of the projects is 1,236 MW. The total annual average greenhouse gas emission reduction of these projects is equivalent to 3,799,068 tons of CO<sub>2</sub>. Of the 42 projects, 24 stated that technology transfer was performed.

Table 4: Investment type of forty-two projects, investment city, stakeholder participation meeting year, capacity and annual average greenhouse gas emission reduction (CO<sub>2</sub> equivalent value) is shown.

| Project | Investment Type           | City      | Year | Capacity<br>(MW) | Greenhouse<br>gas emissions<br>the annual<br>reduction of<br>(tons CO <sub>2</sub> e) |
|---------|---------------------------|-----------|------|------------------|---|
| 1       | Hydroelectric power plant | Trabzon   | 2008 | 9.3              | 17.954  |
| 2       | Hydroelectric power plant | Rize      | 2009 | 9.75             | 22.289  |
| 3       | Hydroelectric power plant | Osmaniye  | 2009 | 13.5             | 30.000  |
| 4       | Hydroelectric power plant | Trabzon   | 2008 | 9.1              | 18.848  |
| 5       | Hydroelectric power plant | Artvin    | 2009 | 12.4             | 30.000  |
| 6       | Hydroelectric power plant | Ankara    | 2008 | 16               | 78.000  |
| 7       | Wind power plant          | Manisa    | 2010 | 45               | 92.970  |
| 8       | Wind power plant          | İzmir     | 2008 | 90               | 175.173   |
| 9       | Wind power plant          | Balıkesir | 2008 | 15               | 30.997  |
| 10      | Wind power plant          | Balıkesir | 2009 | 24               | 59.796  |
| 11      | Wind power plant          | Çanakkale | 2009 | 29.9             | 55.857  |
| 12      | Wind power plant          | Balıkesir | 2010 | 142.5            | 330.000   |
| 13      | Wind power plant          | Balıkesir | 2010 | 45               | 92.000  |
| 14      | Wind power plant          | Edirne    | 2009 | 15               | 32.330  |
| 15      | Wind power plant          | Balıkesir | 2008 | 16               | 39.618  |
| 16      | Wind power plant          | Mersin    | 2011 | 39               | 67.437  |
| 17      | Wind power plant          | Muğla     | 2007 | 29.6             | 63.457  |
| 18      | Wind power plant          | İzmir     | 2009 | 30               | 61.410  |
| 19      | Wind power plant          | Balıkesir | 2012 | 10               | 33.300  |
| 20      | Wind power plant          | İzmir     | 2010 | 12               | 20.641  |
| 21      | Wind power plant          | Amasya    | 2010 | 40               | 66.777  |
| 22      | Wind power plant          | Tokat     | 2010 | 41.4             | 68.000  |
| 23      | Wind power plant          | İzmir     | 2008 | 15               | 36.188  |
| 24      | Wind power plant          | Manisa    | 2008 | 25.6             | 52.000  |
| 25      | Wind power plant          | İzmir     | 2008 | 30               | 76.734  |

Ferhan Can- The Evaluation of Stakeholder Participation of Projects Developed in Turkey and Certified in Voluntary Carbon Markets

| 26 | Wind power plant | Mersin    | 2009 | 33      | 77.810    |
|----|------------------|-----------|------|---------|-----------|
| 27 | Wind power plant | Balıkesir | 2010 | 93      | 185.626   |
| 28 | Wind power plant | Çanakkale | 2010 | 22.5    | 50.477    |
| 29 | Wind power plant | Tekirdağ  | 2008 | 28.8    | 61.122    |
| 30 | Wind power plant | Hatay     | 2009 | 15      | 25.516    |
| 31 | Wind power plant | İzmir     | 2008 | 30      | 67.203    |
| 32 | Wind power plant | Aydın     | 2008 | 30      | 51.841    |
| 33 | Wind power plant | Manisa    | 2008 | 90      | 182.605   |
| 34 | Wind power plant | Hatay     | 2008 | 57.5    | 71.035    |
| 35 | Solid waste      | Adana     | 2009 | 16      | 350.000   |
| 36 | Solid waste      | Bursa     | 2011 | 5.6     | 150.000   |
| 37 | Solid waste      | İzmit     | 2010 | 2.5     | 90.746    |
| 38 | Solid waste      | Konya     | 2010 | 5.6     | 150.000   |
| 39 | Solid waste      | Ankara    | 2009 | 25      | 500.000   |
| 40 | Solid waste      | Samsun    | 2010 | 4.8     | 58.669    |
| 41 | Geothermal       | Aydın     | 2008 | 9.5     | 39.815    |
| 42 | Biogas           | Aksaray   | 2012 | 2.2     | 35.000    |
|    | Total            |           |      | 1236.05 | 3.799.068 |

**Source:** Markit, Financial Information Services, 2016 (This table is created by the author of the article using the information on the web page).

Stakeholder participation process when examined for stakeholders in the Evaluation Template, the stakeholders to be invited are classified as A, B, C, D, E, F according to Gold Standard, and they are defined as local people, local administrators and representatives, Designated National Authority<sup>4</sup>, local NGOs, Gold Standard Regional Management, Gold Standard supporters. These stakeholders were invited to the meeting with a visit, telephone, e-mail, newspaper advertisement or written and oral announcements. A total of 912 people were invited to the stakeholder participation meeting for 38 projects (no information for 4 projects). This shows that 24 people were invited to an average meeting.

<sup>&</sup>lt;sup>4</sup> **Designated National Authority**: This structure is created at national level and is responsible for giving each of the parties of the project a letter of approval to indicate that the project to be implemented will help sustainable development and is based on volunteerism. With this letter, the project is recorded by the Executive Board of the CDM through the authorized Designated Operational Entity.

The number of stakeholders attending the meeting for 40 projects (no information for 2 projects) is 1,438. This shows that 36 people attended the average meeting. 12 meetings 0 - 25 people, 21 meetings 26 - 51 people and 7 meetings were attended by more than 52 shareholders.

862 of 1,438 people attending stakeholder participation meeting are local people. In two of these meetings, nobody were attended from the local people. Since these projects are related to solid waste and biogas, more relevant (e.g. garbage collector) persons have been involved. Thus, a total of 862 people participated in 38 meetings from the local people. On average 22 people attended the meeting from the local people. These figures show that 60% of the participants were from the local population.

104 from central people government attended stakeholder participation meeting (governor, provincial directorates of ministries, gendarmerie, vocational chambers, organized industrial zones, etc.), 118 people from local administrations (mayor, city council members, municipality employees, mukhtar etc.), 97 people from the related company, 35 people from the consulting firm, 41 people from NGOs and 181 people from other professional groups (teacher, engineer, journalist, worker, garbage collector, student, etc.) participated. The number of stakeholders and the number of participants in the meeting is shown in Table 5.

Table 5: The number of stakeholders attending the meeting and their percentages by total participation.

| Stakeholders attending the meeting | Number of<br>stakeholders    | Percentage of total participation |
|------------------------------------|------------------------------|-----------------------------------|
| Invited                            | <b>912</b> (for 38 projects) |                                   |
| Local people                       | 862                          | %60                               |
| Central government                 | 104                          | %7.2                              |
| Local government                   | 118                          | %8.2                              |
| Related enterprise                 | 97                           | %6.7                              |
| Consultant firm                    | 35                           | %2.4                              |
| NGO                                | 41                           | %2.9                              |
| Others                             | 181                          | %12.6                             |
| Total participation                | 1.438 (for 40 projects)      | %100                              |

**Source:** Markit, Financial Information Services, 2016 (This table is created by the author of the article using the information on the web page).

1,217 of those attending the stakeholder participation meeting are men and 221 are women. 90 of 221 women are women from the local community. Only 15% of the total participants are women. Only 10% of local participants are women. There were no female participants in five of the forty stakeholder participation meetings. There were no female participants from local community in twenty six of the forty stakeholder participation meetings. There is little information about whether young people attend the meeting. Only a small number of participants were students in some meetings. When the level of education is examined, it is observed that 30% of the participants are university graduates.

When the stakeholder participation process is examined from the perspective of the participatory approach in the Evaluation Template, it is seen that Gold Standard has a structured system. Time for participants to be involved, method applied for stakeholder participation, disclosure of the project to the participants, the invitation, the participation process and the publication of the results are explained in the fourth section. The project owner organizes the stakeholder participation meeting at Gold Standard.

If the impact of the stakeholders on the decision-making process mentioned in the Evaluation Template is examined, first of all, the opinions expressed by the stakeholders in the meeting should be emphasized. Stakeholder opinions can be grouped into three categories: Economics, social and environmental issues. First, the views on the economy. According to the information obtained from the 36 meetings, 26 meetings requested work, one of the water mill, three of the views about fisheries are included.

Related with social issues, eight road construction or repairs, four water canal construction or repairs, eight contribute to the village (school, mosque, library construction or repairs), in addition to these, they have expressed opinions on issues such as supply of clean water (1), prevention of dust (3), noise pollution (12), odor problem (4), radiation (2), health risk (4), electricity supply to water pumps (1), cheap electricity supply (2), Use of pastures (8), expropriation (3), hazardous waste (2).

Environmental issues related to vegetation, water, soil, birds, fish and other local animals can be summarized as damage. About 18 meetings were reported about the vegetation. On average, four meetings were held on issues related to water, soil, birds, fish and other local animals. As you can see, job requests have been made mostly and most opinions have been expressed on social issues.

The above-mentioned views were answered in the meetings and processed in the files. No changes were made to the Project Design Document except one. In this project, which aims to obtain electricity from the wind, the Project Design Document has been amended by considering the opinions of local people due to expropriation and the complaint process has been handled using the complaint mechanism only in this project. A record number of 109 people participated in the stakeholder participation meeting of this project.

One of the most important demands of the local people is the creation of job opportunities. For this purpose, one of the projects stated that 40% of the employees would provide to the local population, and a total of 1,636 workers would be temporarily employed in 21 project construction phases, and 23 projects would employ 336 workers in total continuously from the local population.

The feedback process is mandatory at Gold Standard. This process can be in the form of meetings or just in the form of feedback. There has been no feedback on 12 of the 36 projects that invited feedback. Two feedback meetings were held, six in various ways (electronic mail, telephone, etc.) feedback has

been made and information has not been reached in the rest of the projects.

In 12 of the meetings, negative views were taken on the Sustainable Development Matrix, which is required to be used in the Gold Standard. If we divide these views into three categories, a total of 98 people in respect of environment (air, water, soil, other pollutants, biodiversity), a total of 43 people in respect of social issues (job quality, livelihood of the poor, access to clean energy, institutional capacity building, education) and a total of 26 people in respect of economy (job opportunities, balance of payments, investment, technology).

## 6. EVALUATION OF RESULTS AND RECOMMENDATIONS

The stakeholder participation processes of Turkey's mitigation projects, which are traded in voluntary carbon markets, have been examined according to the Evaluation Template criteria prepared for this study through the files prepared for Gold Standard. The evaluations and recommendations made as a result of these examinations can be summarized as follows:

From the perspective of stakeholders, the number and diversity of stakeholders invited to the meeting is sufficient. Methods used for stakeholder invitation are also classical methods such as electronic mail, newspaper advertisement. However, given that meetings are usually held in rural areas, it is clear that the announcements of the invitations to the meeting, which are printed on newspaper or papers, will not attract much attention especially in regions where the literacy rate is low. Instead, the awareness and visibility of the meeting should be increased by the invitation of journalist and the use of large posters and pamphlets to be printed, distributed.

From the perspective of the stakeholders attending the meeting, women's participation is low. The participation of women in the meetings, which constitute 50% of the society, should be increased. For this purpose, a quota can be put or

several different meetings can be organized. There is no information on the participation of young people in the meetings. This also must be specified as a separate category, and their participation should be encouraged. In short, difficult access groups should be included in the process.

Another point that attracts attention is that NGOs' participation is low. Since projects are generally related to renewable energy, NGOs may not attract attention. However, any renewable energy project should not be approached positively with the idea that it only reduces greenhouse gas emissions, and other environmental and social impacts of the project should be analyzed. Wind Power Plant projects are usually made on the forest hills and the trees holding greenhouse gas are cut off. It should be questioned whether energy production is more important than improving the quality of life or not. This can be achieved by meeting the demands of the local people and receiving their benefits.

Given that stakeholder participation is a learning process, it is in everyone's interest to increase participation and diversify the represented groups. Stakeholder participation is an important component of good governance (Ministry of Development, 2012).

In the study on Sustainable Development Matrix during the meeting, it was determined that fewer people were filled with this Matrix. In the filling of this Matrix should be encouraged. There was a lack of participation in filling out the printed forms in which the participants had written their opinions. It is thought that there is a low literacy rate in rural areas. In order to keep the participants who have already come to the meeting in the process and enthusiastic, they should be encouraged to express their views in different ways. The participation process should not be bad or ostensible. It is important whether participation is beneficial or not, as well as ensuring participation.

In the projects studied, it is observed that only one project has been modified in the Project Design Document after stakeholder feedback. Looking at this conclusion, it is hard to say that stakeholder opinions are carefully addressed. In the Sustainable Development Matrix, negative opinions were not answered because they did not write comments. Participation in the feedback process is also low. The lack of participation should be questioned. The reason here is that the views are not taken into account.

The publication of invitations and results in the stakeholder participation process of Gold Standard, giving a long time to receive participant opinions, shows that the process is transparent. It is also very important to have a complaint mechanism in the stakeholder participation process. However, this mechanism is not mentioned at stakeholder participation meetings. In order for the complaint mechanism to work, it is stated on the website of Gold Standard that stakeholders can make complaints directly to Gold Standard (Gold Standard, 2016). However, such a process can only be initiated by well-informed people.

Stakeholder participation meeting is organized by the project owner or consultant firm, so it is not possible to say that the process is functioning independently. Organizers may have invited supporters of their own views. Other participants may not express their views freely in this case. Therefore, participants are less likely to influence decisions. Meetings are held after obtaining the necessary permits from the State for energy investments. The aim here is not to ask the local people to do the project on their land or near their living spaces, but to give information about a decision taken and to get their views. The decision taken is also affected in the least way by the result of the process. Investments are usually made by large private companies. In order to generate energy from renewable sources, forests and water resources are transferred to private

companies and the companies have the right to earn carbon credits.

It should be clearly stated what is required to be obtained from the participation. Is the aim is to approve a decision or to enter into a mutually beneficial relationship? Although the stakeholder participation process of the Gold Standard is more structured than the Clean Development Mechanism processes implemented in the compliance markets, it is likely that local participants are not consulted adequately because participants are unlikely to have a big impact on the project. Local people participate in meetings but their contribution to the project and their views on the project are limited.

Almost everywhere in the world, there is a management understanding that is based on constantly taking from the world and never giving it back. But the health of societies and our planet is more important than profit. The economy should be based on the principles of social justice and equality, production should be made not only in order to make profits but also to meet the needs of society, to live not in the face of human nature, but as a part of nature, and to protect the entire ecosystem by strengthening democracy (Klein, 2013; Yılmaz, 2011).

### REFERENCES

- 1. Atılal, B.M. (2016), Karbon Piyasaları, *Turkish Yatırım*, http://www.turkborsa.net/belgeler/raporlar/karbon\_piyasalari.pdf, (28.03.2016).
- 2. Baumert, K.A., Petkova, E., (2000), How will the Clean Development Mechanism Ensure Transparency, Public Engagement and Accountability, Worlds Resource Institute, Climate Notes, Climate Energy and Pollution Program, Washington DC.

- 3. Carbon Market Watch (2013), Views to the Review of the Modalities and Procedures of the Clean Development Mechanism, http://carbonmarketwatch.org/wp-content/uploads/2013/03/Views-on-the-CDM-MPreview\_CarbonMarketWatch\_250320131.pdf, (17.02.2016).
- 4. Change, (2016), Bodrum Kent Konseyi Sürdürülebilir Kentleşme Çalışma Grubu Ortak Basın Metni, https://www.change.org/p/bodrum-da-insana hayvana-%C3%A7evreyeb%C3%BCy%C3%BCk-zararlar%C4%B1-olacak-res kurulmas%C4%B1n-csbgovtr/c/167223676 (29.03.2016).
- 5. Colomb, J., (Ağustos 2009), Kyoto Protokolü, Türkiye'de Karbon Ticareti ve Kazanımları, Önce Kalite Dergisi, s. 48-51.
- 6. Çevre ve Orman Bakanlığı, (Ocak 2011), Karbon Piyasalarında Ulusal Deneyim ve Geleceğe Bakış, T.C. Çevre ve Orman Bakanlığı, Ankara.
- 7. Çevre ve Şehircilik Bakanlığı, (Ekim 2012), *Türkiye'de Karbon Piyasası*, Çevre Yönetimi Genel Müdürlüğü, Ankara.
- 8. Çevre ve Şehircilik Bakanlığı, (2016), Gönüllü Karbon Piyasaları, Türkiye'de
  KarbonPiyasası,http://www.csb.gov.tr/projeler/iklim/index.php?Sa
  yfa=sayfa&Tur=webmenu&Id=12461, (26.03.2016).
- 9. Dong, Y., (2014), Local Stakeholder Participation in CDM and New Climate Mitigation Mechanisms Case Study of a Small Scale Hydropower Project in China, CISDL / GEM Working Paper Series.
- 10. Ecer, M., (2010), Türkiye'de Gönüllü Karbon Piyasalarında Durum ve Yaşanan Zorluklar, T.C. Çevre ve Orman Bakanlığı, Çevre Yönetimi Genel Müdürlüğü, http://www.karbonkayit.cob.gov.tr/Karbon/Files/karbon%20proje,1 9%20ocak%202009%20%C3%A7al%C4%B1%C5%9Ftay.pdf, (28.03.2016).
- 11. Encey, (2009), Gold Standard Paydaş Toplantı Raporu, http://www.encev.com.tr/TR/dosya/1-152/h/samatlarpaydas.pdf, (30.03.2016).
- 12. Gold Standard, (2016), Grievance Policy, http://www.goldstandard.org/sites/default/files/documents/grievance policy 2015. pdf, (26.05.2016).
- 13. Gündoğan, C., (2015), Emisyon Ticaret Sistemi: Türkiye'nin İklim Değişikliği ile Mücadelesinde Öne Çıkan Seçeneğe Kısa

- Bir Bakış, *Eko IQ*, Sayı: 56, http://www.cemgundogan.com/2015/10/15/emission-trading-system-the-only-option-turkey/, (27.03.2016).
- 14. Kalkınma Bakanlığı, (2012), Katılımcılığın İlkeleri: Katılımlı Çalışmaları Tasarlayan, Uygulayan ve Yönetenler İçin İyi Uygulama Kılavuzu, Ankara.
- 15. Karaburunkentkonseyi, (2013), Karaburun Kent Konseyi'nin Karaburun Yarımadası'ndaki RES Yatırımlarına Bakışı, http://www.karaburunkentkonseyi.org/page/27/, (29.03.2016).
- 16. Karen H., O., (2007), The Clean Development Mechanism's Contribution to Sustainable Development: A Review of the Literature, *Climatic Change*, 84: 59-73.
- 17. Klein, N., (2013), Overcoming, Overburden: The Climate Crisis and a Unified LeftAgenda, Commondreams, http://www.commondreams.org/views/2013/09/04/overcoming-overburden-climate-crisis-and-unified-left agenda, (26.05.2016).
- 18. Konak, N., (Eylül 2011), Küresel İklim Değişikliği, Kyoto Protokolü Esneklik Mekanizmaları, Gönüllü Karbon Piyasaları ve Türkiye: Eleştirel Yaklaşım, *Alternatif Politika*, Cilt: 3, Sayı: 2, s.154- 178.
- 19. Kuzeyormanları, (2015), Bodrum'da RES'e karşıyız, çünkü...,http://www.kuzeyormanlari.org/2015/12/19/bodrumdarese-karsiyiz-cunku/, (29.03.2016).
- 20. Markit, (2016), Markit, Financial Information Services, Registry, Public View,
  https://mer.markit.com/brreg/public/index.jsp?entity=project&sort
  =project\_name& dir =ASC&start=0&entity\_domain
  =Markit%2cGoldStandad, (23.05.2016).
- 21. Narin, M., (2013), Kyoto Protokolü Esneklik Mekanizması: Emisyon Ticareti, *International Conference on Eurasian Economies*, Session 4D: Cevre.
- 22. Nyaoro, J., Chatterjee, B., (2011), Briefing Paper: Governance on the Clean Development Mechanism (CDM), AEA Technology, ED56638, Issue Number 1, Ref: CLIMA.B.3/ETU/2010/0020r.
- 23. ParisAgreement,(2015),http://unfccc.int/files/essential\_background/convention/application/pdf/english\_paris\_agreement.pdf, (16.03.2017).
- 24. REC Türkiye, Bölgesel Çevre Merkezi, (Mayıs 2015), A'dan Z'ye İklim Değişikliği Başucu Rehberi, Yayına Hazırlayanlar: Arif Cem

- Gündoğan, Et al. Almanya Federal Cumhuriyeti Ankara Büyükelçiliği katkılarıyla, Ajanstürk Matbaacılık A.Ş.
- 25. Standardsmap, (2016), The Gold Standard, International Trade Center,
  - http://search.standardsmap.org/assets/media/TheGoldStandard/English/AtAGlance\_EN.pdf, (29.03.2016).
- 26. Türkiye Bilimler Akademisi Raporlar Dizisi-TÜBA (2010), Türkiye Açısından Dünyada İklim Değişikliği, Sayı: 22, Yeni Reform Matbaacılık, Ankara.
- 27. Yılmaz, S., Yılmaz, G., (2011), Yenilenebilir Enerji vs. Yenilenemeyen Doğa, *Praksis*, Sayı 25, http://emekdoga.org/yenilenebilir\_enerji\_yenilenemeyen\_doga\_kar bon ticareti.htm, (17.09.2014).
- 28. Zoren, (2006), Gold Standard Gönüllü Dengeleme Projeleri Proje Tasarım
  - Dokümanları,http://zoren.com.tr/FILES/RotorElektrilUretimOsmaniyeWindFarm01-V7.pdf, (30.03.2016).