

## Chapter 34

# Green Development: Case of Turkey, Norway, and China

**Bülent Doğru**

*Gümüşhane University, Turkey*

**Hikmet Gülçin Beken**

*Gümüşhane University, Turkey*

### **ABSTRACT**

*The focus of this chapter is to assess green or sustainable development concept because of its increased importance throughout the world. Droughts, environmental degradation, air pollution, greenhouse gas emissions are important problems that the humankind have been facing since the Industrial Revolution. Renewable energy sources can be used to overcome these problems. The general tendency of modern-day societies is to transform traditional production techniques and development models to new renewable energy sources and also move towards to sustainable development path. Therefore, this study tries to explain current status of Norway, China and Turkey in terms of their renewable energy sources and policy implementations.*

### **ABSTRACT**

The focus of this chapter is to assess green or sustainable development concept because of its increased importance throughout the world. Droughts, environmental degradation, air pollution, greenhouse gas emissions are important problems that the humankind have been facing since the Industrial Revolution. Renewable energy sources can be used to overcome these problems. The general tendency of modern-day societies is to transform traditional production techniques and development models to new renewable energy sources and also move towards to sustainable development path. Therefore, this study tries to explain current status of Norway, China and Turkey in terms of their renewable energy sources and policy implementations.

DOI: 10.4018/978-1-5225-3817-2.ch034

## **INTRODUCTION**

Nowadays it's a well-known fact that since the First Industrial Revolution (FIR) we have pumped million tons of carbon dioxide and other harmful gases into the earth's atmospheric layer to which all the living things, human, animal and plants are dependent. The negative effects of the FIR and the climate change prove that we are living in a quite fragile earth. This fragile planet has been used as a huge garbage can for many years. Industrial pollution, global warming and climate and environmental changes have now an unpredicted economic, social, and political effects on 7 billion people throughout the world. However, recently there is a growing demand towards a more green, sustainable and environmentally sensitive way of life since the beginning of twenty-first century. This demand is being supported by renewable energy sources and technological improvements. In twenty-first century, may be in a very near future, it is expected that the fossil fuels have been dominating life of humankind for many years will be replaced by energy-saving way of life in terms of consumption and production.

In the last century, especially inability to avoid the use of fuel and the petroleum based energy sources and greenhouse gasses from carbon emissions have caused the drastic changes in weather patterns never witnessed. The World's being surrendered by fossil fuels since the FIR has made our planet extraordinarily hotter and polluted today.

In addition to these destructive weather changes, the World's poorest countries have had to face many problems such as drought and famine related to the more polluted plant from many aspects. These problems made these countries more fragile than the others.

Today, some developed and developing countries, especially Scandinavian countries in the north Europe, are trying to change their production methods from traditional and harmful techniques, mostly depending on fossil fuels, to the sustainable methods based on renewable energy sources without serious damage to the nature and our planet. Furthermore, the environmental damage that is a result of fossil fuels has been taxed in some industrialized countries. For instance, in Norway contemporary generation is paying a tax for using the next generation's share from nature and environment.

Despite some international environmental regulations such as the Kyoto Protocol, and despite the increasing importance of green and sustainable development in the twenty-first century, we have not yet reached to the desired levels for the sake of our planet in terms of a clean and habitable world. It is, however, potentially seen that in the future environmental pollution based on usage of fossil fuels will face various penalties for non-compliance to the environmental regulations. The Paris United Nation Conference in 2015 represents a powerful commitment to solve the problem of raising greenhouse gas emissions, with the contributions of the action plans of both developed and developing countries throughout the world.

The rest of this chapter is organized as follows: The first part of the chapter introduces the Green Industrial Revolution; the second part is on the innovative green development. After the explanation of the green development we handle some country examples in the third part of the chapter including Turkey, Norway and China. The chapter ends with the evaluation and suggestions as concluding remarks.

## **GREEN INDUSTRIAL REVOLUTION**

The FIR, took place in England in the late eighteenth century, was both a turning point for human history and closure of a pre-industrial production age. Before this industrial revolution, people generally used

32 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/green-development/189922](http://www.igi-global.com/chapter/green-development/189922)

## Related Content

---

### Two First Generation Biofuel (Biodiesel, Bioethanol) and Sustainability: Some Other Realities for India and Trade Patterns

(2014). *Sustainability Science for Social, Economic, and Environmental Development* (pp. 174-208).

[www.irma-international.org/chapter/two-first-generation-biofuel-biodiesel-bioethanol-and-sustainability/101574](http://www.irma-international.org/chapter/two-first-generation-biofuel-biodiesel-bioethanol-and-sustainability/101574)

### Minimum Power Performance-Based Virtual Machine Consolidation Technique for Green Cloud Datacenters

T.R.V. Anandharajan and M.A. Bhagyaveni (2014). *International Journal of Green Computing* (pp. 24-43).

[www.irma-international.org/article/minimum-power-performance-based-virtual-machine-consolidation-technique-for-green-cloud-datacenters/113749](http://www.irma-international.org/article/minimum-power-performance-based-virtual-machine-consolidation-technique-for-green-cloud-datacenters/113749)

### Migrant Remittances and Financial Inclusion in Africa: A Dynamic and Long-Run Approach

Abba Yadou Barnabe (2021). *Handbook of Research on Institution Development for Sustainable and Inclusive Economic Growth in Africa* (pp. 153-168).

[www.irma-international.org/chapter/migrant-remittances-and-financial-inclusion-in-africa/266982](http://www.irma-international.org/chapter/migrant-remittances-and-financial-inclusion-in-africa/266982)

### Rising Oil Pollution in Nigerian's Niger-Delta Region: What About Its Framing in the Print Media?

Chka Ebere Odoemelam and Nik Norma Nik Hasan (2022). *International Journal of Social Ecology and Sustainable Development* (pp. 1-23).

[www.irma-international.org/article/rising-oil-pollution-in-nigerians-niger-delta-region/292077](http://www.irma-international.org/article/rising-oil-pollution-in-nigerians-niger-delta-region/292077)

### Challenges and Opportunities for the Development and Management of Urban Green Areas in Addis Ababa: The Case of Cooperative Housing Green Areas and Street Trees in Nifas Silk Lafto Sub-City

Gebrye Kefelew and Tebarek Lika (2018). *Sustainable Development: Concepts, Methodologies, Tools, and Applications* (pp. 1351-1370).

[www.irma-international.org/chapter/challenges-and-opportunities-for-the-development-and-management-of-urban-green-areas-in-addis-ababa/189949](http://www.irma-international.org/chapter/challenges-and-opportunities-for-the-development-and-management-of-urban-green-areas-in-addis-ababa/189949)