


# Chapter 16

## The Role of FinTech in Advancing Green Financing

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### ABSTRACT

*An essential structural modification that is needed to halt the earth's rising temperature and advance ecological sound practices is through promoting green finance with increasing support of technological innovations. Technological innovations have the potential to accelerate green finance growth while balancing bank sustainability and profitability. Green finance as a financial tool can assure that both the economy and the environment can grow sustainably. Since its emergence, the presence of FinTech based on big data and artificial intelligence technology can be noticed in various fields. In light of the numerous advantages FinTech provides, it can be employed in blossoming green finance. Hence, the chapter aims to demonstrate the role of fintech in promoting green finance. This chapter also focuses on green finance, green finance's importance, projects that come under green finance, and the economic benefits green finance provides. Finally, this chapter explores the association between green finance, fintech, and environmental sustainability.*

### INTRODUCTION

Since the Industrial Revolution began in 1760, there has been a fast rise in economic activity worldwide and in quality of life for people, but this came at the  
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cost of the environment. Lack of resources, serious environmental damage, and detrimental impacts brought on by unsustainable fossil energy use and ignorance for emitting pollutants pose an imminent danger to long-term prosperity. The Brundtland Report introduced the term “sustainable development” in 1987 to address both the demands of today’s generation and those of the generations that follow. Sustainable development aims at maintaining the capacity of ecological networks so that ecosystem services as well as natural resources that play a key role in the development of the economy and society can be provided. The concept of sustainable development has gained widespread acceptance and has emerged as one of the key factors influencing both economic expansion and conservation of the environment. Sustainable development is the backbone of monetary sustainability, which is closely tied to financing and is the basis for sustained financial stability. Green finance has advanced tremendously since it was first offered as a way to safeguard the environment. According to definitions, “financial investments streaming into environmentally friendly initiatives and programs, green goods as well as laws aimed at promoting the emergence of a healthier economy” are all included in the term “green finance.” Incorporating financial choices with sustainability, green finance links both the public and private financial sectors with sustainable development. It also encourages ecologically sound business models that prioritize renewable energy, better quality of air and water, single-use plastics, and other green technologies. Green finance bridges the gap between financiers, buyers, manufacturers, and customers and promotes the use of financing as a means to help environmental conservation. However, investing in green projects will cost trillions of dollars. It is predicted that every year 5-7 trillion dollars should be invested in environmentally friendly industries to achieve the United Nations Sustainable Development Goals and the Paris Agreement on Climate Change. The need to leverage the potential of fintech to enhance green finance, however, seems vital given the limitations of the current green financial channels. Fintech in layman language is combining financial services with digitization. Fintech is the combination of two words i.e. financial services and technological innovations. Hence, it includes combining financial services with digitization. A banker in New York was the first to come up with the phrase “FinTech.” The rising use of Fintech in the modern world has entirely changed the process as the financial industry conducts business and provides customer care incorporating green Fintech in financial services can minimize the threat of climate change. Since 2018, the field of financial technology (Fintech) has experienced rapid expansion, with new investments coming from around the world totaling around \$60 billion (Arslanian and Fischer, 2019). By utilizing contemporary computer communication, data science, networking, and Artificial Intelligence (AI) technology, fintech provides new ways to conduct financial transactions and provide banking services. Fintech

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