

# Firm innovation strategies in alternative energy systems

Citation for published version (APA):

Bhuyan, R. (2022). *Firm innovation strategies in alternative energy systems: Dynamics of Firm Innovation Strategies Over the Technology Life Cycle*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20221107rb>

## Document status and date:

Published: 01/01/2022

## DOI:

[10.26481/dis.20221107rb](https://doi.org/10.26481/dis.20221107rb)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

## **SOCIAL IMPACT**

This thesis makes contribution to the knowledge in an important area – clean and alternative sources of energy. Clean, alternative sources of energy are a key component of the more sustainable economy we are seeking in the 21<sup>st</sup> century. Sustainable alternative energy like biomass, geothermal, hydropower, solar, wind, hydrogen fuel cells, tidal and wave offers tremendous benefits for meeting current global energy needs, which are clean and green.

Globally, many governments and institutions are focused on transitioning from fossil fuel-based energy sources such as coal, oil and gas to cleaner, renewable sources of energy. It has been understood that the key to tackling the climate crisis is to end reliance on energy generated from fossil fuels, which is the main cause of climate change.

However, despite tremendous global efforts, the transition from fossil fuels has been wrought with many difficulties, mostly involving systemic, regulatory and industrial bottlenecks and red tape.

Other than the important role of policies, in the removal of fossil-fuel subsidy, for example, another important consideration that can and is enabling a transition to cleaner alternative sources of energy is the role of firms. So to this end, this research lends to our understanding of alternative energy industries by analysing the factors and interactions that occurs

The research also contributes to theory by analysing the influence of technology on firm innovation strategy and the interaction across three levels – the firm, the industry and the technology.