

## TABLE OF CONTENTS

<b>INTRODUCTION</b>	<b>4</b>
<b>CHAPTER 1. NEEDS OF RENEWABLE ENERGY</b>	<b>6</b>
1.1. GLOBALIZATION AND GLOBAL WARMING	6
1.2. END OF FOSSIL FUELS?	7
1.3. RENEWABLE ENERGY AS THE PROSPECTS FOR CURRENT AND FUTURE ENERGY SUPPLY	9
1.4. RENEWABLE ENERGY AND DEVELOPMENT	10
<b>CHAPTER 2. RENEWABLE ENERGY TECHNOLOGIES IN ECONOMIC PERSPECTIVES</b>	<b>12</b>
2.1. INTRODUCTION	12
2.2. THEORETICAL CONSIDERATIONS	12
2.2.1 TECHNOLOGICAL CHANGE IN ENDOGENOUS GROWTH	15
2.2.2 TECHNOLOGICAL CHANGE AND ENVIRONMENTAL QUALITY	22
2.3. RENEWABLE ENERGY TECHNOLOGY TYPE	23
2.3.1 RENEWABLE ELECTRICITY PRODUCTION	23
2.3.1.1 Hydropower	24
2.3.1.2 Biomass Energy	25
2.3.1.3 Wind Energy	26
2.3.1.4 Geothermal energy	26
2.3.1.5 Solar Energy	26
2.3.1.6 Wave and Tidal	27
2.3.2 RENEWABLE ENERGY FOR FUEL PRODUCTION	27
2.4. POTENTIAL FOR RENEWABLE ENERGY TECHNOLOGIES	28
<b>CHAPTER 3. RENEWABLE ENERGY POLICIES IN DEVELOPING COUNTRIES</b>	<b>36</b>
3.1. RENEWABLE ENERGY POLICY IN DEVELOPING COUNTRIES – ACTUAL STATUS	36
3.2. IMPLEMENTATION OF RENEWABLE ENERGY POLICIES	37
3.2.1 BRAZIL	39
3.2.2 MEXICO	40
3.2.3 CHINA	41
3.2.4 INDIA	42
3.2.4 SOUTH AFRICA	44
3.3. DO INSTITUTIONAL MATTERS TO PROMOTE RENEWABLE ENERGY?	47
<b>CHAPTER 4. POLICY ASSESSMENT STUDY</b>	<b>50</b>
4.1. RENEWABLE ENERGY POLICY IN DEVELOPING COUNTRIES – ACTUAL STATUS	50
4.1. TOOLS ASSESSMENT FOR RENEWABLE ENERGY POLICY	53
4.1.1 PARTIAL EQUILIBRIUM APPROACH	56
4.1.2. GENERAL EQUILIBRIUM APPROACH	57
4.2. TOP-DOWN AND BOTTOM-UP MODELS	62
4.3. TAXONOMY OF TECHNICAL CHANGE DEVELOPMENT	65
4.3.1 EXOGENOUS SPECIFICATION OF TECHNICAL CHANGE	65
4.3.2 ENDOGENOUS SPECIFICATION OF TECHNICAL CHANGE	66
<b>CHAPTER 5. CONCLUSIONS</b>	<b>68</b>