Contents

	-	f Symbols, Units and Abbreviations ighout the Report	1
Exec	cutive	Summary	2
1.	Intro	oduction	13
	1.1	Background	13
	1.2	Aims and Objectives of the Present Study	17
	1.3	Outline of the Report	18
2.	Win	d Energy	19
	2.1	Technical Review of Wind Energy	19
	2.2	Economic Review of Wind Energy	24
	2.3	Environmental Impacts and Public Acceptability of Wind Energy in the European Context	28
	2.4	The Commercialization of Wind Energy in Europe	33
3.	Sola	r Heating & Cooling and Daylighting	36
	3.1	Technical Review of Solar Heating & Cooling and Daylighting	36
	3.2	Economic Review of Solar Heating & Cooling	12

	3.3	Environmental Impacts and Public Acceptability of Solar Heating & Cooling and Daylighting in the European Context	47
	3.4	The Commercialization of Solar Heating & Cooling and Daylighting in Europe	49
4.	Phot	tovoltaics	52
	4.1	Technical Review of Photovoltaics	52
	4.2	Economic Review of Photovoltaics	60
	4.3	Environmental Impacts and Public Acceptability of Photovoltaics in the European Context	64
	4.4	The Commercialization of Photovoltaics in Europe	66
5.	Bion	nass	69
	5.1	Technical Review of Biomass Energy	69
	5.2	Economic Review of Biomass Energy	80
	5.3	Environmental Impacts and Public Acceptability of Biomass Energy in the European Context	85
	5.4	The Commercialization of Biomass Energy in Europe	89
6.	Conclusions: Prospects for the Development of Renewable Energy in Europe to the year 2000		
	6.1	Overview of the Current Status, in Europe, of the four specific Renewable Energy Technologies under review	93
	6.2	Conservative Estimates on Share of Community Energy Consumption by the end of the Century	94
	6.3	Factors affecting Further Development	95

111

6.4 Final Conclusions

Appendices

- 1. Choice of Renewable Energy Options
- EUR-12 Primary Energy Production/Consumption 1991
- 3. Energy Imports and Final Energy Consumer Prices 1991
- CO2, SO2 and NOX Emission Levels, 1991
- Energy in Europe 1990-2000: Four Possible Energy Scenarios / Total Primary Energy Requirements