

# TABLE OF CONTENTS

<b>1</b>	<b>EXECUTIVE SUMMARY &amp; KEY RECOMMENDATIONS</b> .....	7
	Executive Summary .....	7
	Key Recommendations .....	9
<b>2</b>	<b>GENERAL ENERGY POLICY</b> .....	11
	Country Overview .....	11
	Supply and Demand .....	12
	Institutions .....	14
	Key Policies .....	15
	Energy Taxes .....	20
	Critique and Recommendations .....	22
<b>3</b>	<b>ENERGY AND THE ENVIRONMENT</b> .....	25
	Climate Change .....	25
	Local Air Pollution .....	32
	Critique and Recommendations .....	33
<b>4</b>	<b>ENERGY EFFICIENCY</b> .....	37
	Overview .....	37
	Legal and Institutional Framework .....	39
	Policies and Measures .....	40
	Critique and Recommendations .....	43
<b>5</b>	<b>RENEWABLE ENERGY</b> .....	47
	Production .....	47
	Institutions .....	47
	Policies and Measures .....	50
	Critique and Recommendations .....	53
<b>6</b>	<b>FOSSIL FUELS</b> .....	57
	Oil .....	57
	<i>Supply and Demand</i> .....	57
	<i>Industry Structure</i> .....	58
	<i>Prices and Taxes</i> .....	59
	<i>Emergency Response System</i> .....	63
	Natural Gas .....	63
	<i>Supply and Demand</i> .....	63
	<i>Legal Framework</i> .....	64
	<i>Industry Structure</i> .....	65
	<i>Infrastructure</i> .....	66
	<i>Prices and Taxes</i> .....	68
	Coal .....	71
	Critique and Recommendations .....	71

<b>7</b>	<b>ELECTRICITY</b> .....	75
	Supply and Demand .....	75
	Legal Framework .....	77
	Industry Structure .....	79
	Transmission and Distribution .....	81
	International Trade.....	85
	Prices and Taxes.....	87
	Critique and Recommendations .....	91
<b>8</b>	<b>NUCLEAR ENERGY</b> .....	95
	Overview .....	95
	Legal Framework .....	97
	Nuclear Safety.....	97
	Waste Disposal and Decommissioning .....	98
	Critique and Recommendations .....	99
<b>9</b>	<b>RESEARCH AND DEVELOPMENT</b> .....	101
	Overview .....	101
	Funding .....	103
	International Collaboration.....	108
	Critique and Recommendations .....	108
<b>A</b>	<b>ANNEX: ORGANISATION OF THE REVIEW</b> .....	111
	Review Criteria .....	111
	Review Team .....	111
	Organisations Visited .....	112
<b>B</b>	<b>ANNEX: ENERGY BALANCES AND KEY STATISTICAL DATA</b> ...	113
<b>C</b>	<b>ANNEX: INTERNATIONAL ENERGY AGENCY “SHARED GOALS”</b> ..	117
<b>D</b>	<b>ANNEX: GLOSSARY AND LIST OF ABBREVIATIONS</b> .....	119

## Tables and Figures

### TABLES

1. Objectives and Implementation Status of the SwissEnergy Programme.	19
2. Energy Taxes in Switzerland, 2007 .....	20
3. Greenhouse Gas Emissions in Switzerland by Gas, 1990 and 2005 ...	25
4. CO <sub>2</sub> Emissions from Fuel Combustion in Switzerland by Sector, 1990 and 2005.....	27
5. Climate Cent Foundation’s Budget, 2005 to 2012 .....	29
6. Conditions for the Introduction of a CO <sub>2</sub> Tax on Stationary Fuels...	30

7. Historical and Projected Emissions of Selected Air Pollutants in Switzerland.....	32
8. Renewables Supply, 1970 to 2006.....	48
9. Electricity Generation from Renewables, 1970 to 2006.....	49
10. Feed-in Tariffs by Technology, as from 1 October 2008.....	51
11. Green Electricity Sales by Mode of Production, 2006.....	52
12. Distribution of Oil Imports by Mode of Transport, 2005.....	57
13. Shareholders of Swissgas, 2006.....	66
14. Largest Electricity Companies Based in Switzerland, 2006.....	80
15. Shareholders of Swissgrid, 2007.....	81
16. Net Transfer Capacities between Switzerland and its Neighbours, Winter 2006/07 and Summer 2007.....	85
17. Switzerland's Electricity Trade by Country, 2000 to 2006.....	86
18. Nuclear Power Plants in Operation in Switzerland, 2007.....	95
19. Ownership of the Swiss Nuclear Power Plants, 2007.....	96

## FIGURES

1. Map of Switzerland.....	10
2. Total Primary Energy Supply, 1973 to 2030.....	13
3. Energy Production by Source, 1973 to 2030.....	13
4. Total Final Consumption by Source, 1973 to 2030.....	14
5. Fuel Prices, 2006.....	21
6. Energy-Related CO <sub>2</sub> Emissions per GDP in Switzerland and in Other Selected IEA Countries, 1973 to 2010.....	26
7. Energy Intensity in Switzerland and in Other Selected IEA Countries, 1973 to 2010.....	37
8. Total Final Consumption by Sector and by Source, 1973 to 2030.....	38
9. Green Electricity Sales, 1996 to 2006.....	52
10. Final Consumption of Oil by Sector, 1973 to 2030.....	58
11. OECD Light Fuel Oil Prices and Taxes, Second Quarter 2007.....	60
12. OECD Unleaded Gasoline Prices and Taxes, Second Quarter 2007.....	61
13. OECD Automotive Diesel Prices and Taxes, Second Quarter 2007.....	62
14. Final Consumption of Natural Gas by Sector, 1973 to 2030.....	64
15. Map of the Swiss Natural Gas System.....	67
16. Gas Prices in Switzerland and in Other Selected IEA Countries, 1980 to 2006.....	69
17. Gas Prices in IEA Countries, 2006.....	70
18. Electricity Generation by Source, 1973 to 2030.....	75
19. Final Consumption of Electricity by Sector, 1973 to 2030.....	76
20. Map of the Swiss High-Voltage Electricity Grid.....	82
21. Electricity Prices in Switzerland and in Other Selected IEA Countries, 1980 to 2006.....	89

22. Electricity Prices in IEA Countries, 2006 ..... 90  
23. Distribution of Public Energy R&D Spending by Source, 2005..... 104  
24. Distribution of Public Energy R&D Spending by Recipient, 2005.. 105  
25. Public Spending on Energy R&D by Sector, 1990 to 2006..... 106  
26. Government Spending on Energy R&D per Capita in IEA Countries,  
2006 ..... 107