

Global Tracking Framework: UNECE Progress in Sustainable Energy



The current rate of progress is insufficient to achieve the three pillars of SDG7 by 2030

Despite advances in electricity access, challenges of energy affordability and quality persist

Improving energy efficiency is the most important enabler for sustainable energy

The uptake and investments into renewable energy vary vastly across the UNECE region

Indicators need to be refined to reflect the real imperatives of energy for sustainable development



Contents

Foreword	iii
Acknowledgements	iv
Executive Summary	1
I. Introduction	5
1.1. Sustainable Energy and the Sustainable Development Agenda	5
1.2. “Energy for Sustainable Development” in the 2030 Agenda	7
1.3. A System Perspective on Sustainable Energy	7
1.4. UNECE Region Overview	8
II. Tracking Sustainable Energy Progress in UNECE	11
2.1. Overview	11
2.1.1. Energy in the UNECE Region	11
2.2. Progress across SDG 7 Targets	14
2.2.1. Energy Efficiency	14
2.2.2. Renewable Energy	17
2.2.3. Energy Access	20
2.3. Beyond SDG 7: Energy for Sustainable Development	21
2.3.1. Energy Productivity	21
2.3.2. Fossil Fuels	23
2.3.3. Climate Commitments	23
III. Sustainable Energy in UNECE: Selected Issues and Country Case Studies	29
3.1. Overview to Issues Considered in this Report	29
3.2. Improving Required Energy Services	29
3.2.1. Selected Issues and Country Responses	29
3.2.2. Opportunities and Prospects	34
3.3. End-Use Energy Efficiency	35
3.3.1. Selected Issues and Country Responses	35
3.3.2. Opportunities and Prospects	43

3.4. Integrating Distributed Generation	50
3.4.1. Selected Issues and Country Responses.....	50
3.4.2 Opportunities and Prospects.....	52
3.5. Improving Supply-Side Sustainability in Generation and Transmission.....	54
3.5.1. Selected Issues and Country Responses.....	54
3.5.2 Opportunities and Prospects.....	61
3.6. Energy Resource Sustainability	62
3.6.1 Selected Issues and Country Responses.....	62
3.6.2 Opportunities and Prospects.....	67
IV. Conclusions and Recommendations	71
Acronyms and Abbreviations.....	74
Units of Measurement	76
Glossary.....	77
Annexes.....	79
Annex I. Overview: Socio-Economic Data for UNECE member States	79
Annex II. UNECE member States' TPES, TPES / Capita and Own Production in 2014	81
Annex III. Energy for Sustainable Development Indicators and GTF Methodology.....	83
Annex IV. Draft List of Indicators to Track Energy for Sustainable Development.....	84
Annex V. Overview: Status of Renewable Energy Policies in UNECE member States	88
References.....	93
Endnotes	101