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Jean-Christophe Hadorn

Solar and Heat Pump Systems for Residential Buildings

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Cover: The cover photo shows selective unglazed collectors in Vouvry (CH). (Photo by O. Graf, © Energie Solaire SA Switzerland)

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Library of Congress Card No.: applied for

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at <http://dnb.d-nb.de>.

Print ISBN: 978-3-433-03040-0
ePDF ISBN: 978-3-433-60484-7
ePub ISBN: 978-3-433-60485-4
Mobi ISBN: 978-3-433-60482-3
oBook ISBN: 978-3-433-60483-0

Typesetting: Thomson Digital, Noida, India
Printing and Binding: betz-druck GmbH, Darmstadt, Germany

Printed in the Federal Republic of Germany
Printed on acid-free paper

Contents

	About the editor and the supervisors	IX
	List of contributors	XI
	IEA solar heating and cooling programme	XV
	Forewords	XVII
	Acknowledgments	XIX
1	**Introduction**	1
1.1	The scope	1
1.2	Who should read this book?	1
1.3	Why this book?	1
1.4	What you will learn reading this book?	2
	Internet sources	4

Part One
Theoretical Considerations 5

2	**System description, categorization, and comparison**	7
2.1	System analysis and categorization	7
2.1.1	Approaches and principles	7
2.1.2	Graphical representation of solar and heat pump systems	8
2.1.3	Categorization	9
2.2	Statistical analysis of market-available solar thermal and heat pump systems	11
2.2.1	Methods	12
2.2.2	Results	14
2.2.2.1	Surveyed companies	14
2.2.2.2	System functions	14
2.2.2.3	System concepts	15
2.2.2.4	Heat pump characteristics – heat sources	15
2.2.2.5	Collector types	17
2.2.2.6	Cross analysis between collector type and system concept	18
2.3	Conclusions and outlook	19
2.4	Relevance and market penetration – illustrated with the example of Germany	19
	References	21
3	**Components and thermodynamic aspects**	23
3.1	Solar collectors	23
3.2	Heat pumps	28
3.3	Ground heat exchangers	34
3.3.1	Modeling of vertical ground heat exchangers	38
3.3.2	Modeling of horizontal ground heat exchangers	40
3.3.3	Combining GHX with solar collectors	41
3.4	Storage	42

3.4.1 Sensible heat storage and storage in general 42
3.4.2 Latent storage 45
3.4.3 Thermochemical reactions and sorption storage 46
3.5 Special aspects of combined solar and heat pump systems 47
3.5.1 Parallel versus series collector heat use 47
3.5.2 Exergetic efficiency and storage stratification 50
References 52

4 Performance and its assessment 63
4.1 Introduction 63
4.2 Definition of performance figures 65
4.2.1 Overview of performance figures in current normative documents 65
4.2.1.1 Heat pumps 66
4.2.1.2 Solar thermal collectors 67
4.2.2 Solar and heat pump systems 67
4.2.3 Efficiency and performance figures 68
4.2.4 Component performance figures 70
4.2.4.1 Coefficient of performance 70
4.2.4.2 Seasonal coefficient of performance 70
4.2.4.3 Solar collector efficiency 71
4.2.5 System performance figures 71
4.2.5.1 Seasonal performance factor 71
4.2.6 Other performance figures 72
4.2.6.1 Solar fraction 72
4.2.6.2 Renewable heat fraction 74
4.2.6.3 Fractional energy savings 74
4.3 Reference system and system boundaries 75
4.3.1 Reference SHP system 75
4.3.2 Definition of system boundaries and corresponding seasonal performance factors 77
4.4 Environmental evaluation of SHP systems 87
4.4.1.1 Primary energy ratio 90
4.4.1.2 Equivalent warming impact 91
4.4.1.3 Fractional primary energy savings 91
4.4.1.4 Fractional CO_2 emission savings 91
4.5 Calculation example 91
Appendix 4.A Reviewed standards and other normative documents 97
References 102

5 Laboratory test procedures for solar and heat pump systems 103
5.1 Introduction 104
5.2 Component testing and whole system testing 106
5.2.1 Testing boundary and implications on the test procedures 106
5.2.2 Direct comparison of CTSS and WST 109

5.2.3 Applicability to SHP systems 112
5.2.4 Test sequences and determination of annual performance 115
5.2.4.1 Direct extrapolation of results (WST for combi-systems) 116
5.2.4.2 Modeling and simulation 117
5.2.5 Output 119
5.3 Experience from laboratory testing 120
5.3.1 Extension of CTSS test procedure toward solar and heat pump systems 120
5.3.2 Results of whole system testing of solar and heat pump systems 121
5.3.2.1 Excessive charging of the DHW zone 123
5.3.2.2 Exergetic losses in general 123
5.3.3 Extension of DST test procedure toward solar and heat pump systems 123
5.4 Summary and findings 126
References 128

Part Two
Practical Considerations 131

6 Monitoring 133
6.1 Background 133
6.2 Monitoring technique 134
6.2.1 Monitoring approach 134
6.2.2 Measurement technology 137
6.2.2.1 Data logging systems 137
6.2.2.2 Heat meters 137
6.2.2.3 Electricity meters 138
6.2.2.4 Meteorological data 139
6.2.2.5 Temperature sensors 139
6.3 Solar and heat pump performance – results from field tests 139
6.4 Best practice examples 145
6.4.1 Blumberg 145
6.4.2 Jona 147
6.4.3 Dreieich 149
6.4.4 Savièse 152
6.4.5 Satigny 154
References 157

7 System simulations 159
7.1 Parallel solar and heat pump systems 159
7.1.1 Best practice for parallel solar and heat pump system concepts 161
7.1.2 Performance of parallel solar and heat pump systems 164
7.1.3 Performance in different climates and heat loads 166
7.1.4 Fractional energy savings and performance estimation with the FSC method 169
7.2 Series and dual-source concepts 171

7.2.1 Potential for parallel/series concepts with dual-source heat pump 171
7.2.2 Concepts with Ground Regeneration 173
7.2.3 Other series concepts: dual or single source 177
7.2.4 Multifunctional concepts that include cooling 183
7.3 Special collector designs in series systems 184
7.3.1 Direct expansion collectors 184
7.3.2 Photovoltaic–thermal collectors 184
7.3.3 Collector designs for using solar heat as well as ambient air 186
7.4 Solar thermal savings versus photovoltaic electricity production 187
7.5 Comparison of simulation results with similar boundary conditions 188
7.5.1 Results for Strasbourg SFH45 189
7.5.1.1 Heat sources 191
7.5.1.2 System classes 191
7.5.1.3 Dependence on collector size and additional effort 192
7.5.1.4 Electricity consumption 193
7.5.2 Results for Strasbourg SFH15 and SFH100 195
7.5.3 Results for Davos SFH45 196
7.6 Conclusions 197
Appendix 7.A Appendix on simulation boundary conditions and platform independence 199
References 204

8 Economic and market issues 209
8.1 Introduction 209
8.2 Advantages of SHP systems 210
8.3 The economic calculation framework 211
8.4 A nomograph for economic analysis purposes 216
8.5 Application to real case studies 219
References 228

9 Conclusion and outlook 229
9.1 Introduction 229
9.2 Components, systems, performance figures, and laboratory testing 229
9.3 Monitoring and simulation results and nontechnical aspects 231
9.4 Outlook 233
9.4.1 Energy storage 233
9.4.2 System prefabrication 234
9.4.3 System quality testing 234
9.4.4 Further component development 234

Glossary 237

Index 241

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IEA solar heating and cooling programme

The Solar Heating and Cooling Programme was founded in 1977 as one of the first multilateral technology initiatives ("Implementing Agreements") of the International Energy Agency. Its mission is to "advance international collaborative efforts for solar energy to reach the goal set in the vision of contributing 50% of the low temperature heating and cooling demand by 2030."

The member countries of the Programme collaborate on projects (referred to as "Tasks") in the field of research, development, and demonstration (RD&D) and test methods for solar thermal energy and solar buildings.

A total of 53 such projects have been initiated to date, 39 of which have been completed. Research topics include

- Solar Space Heating and Water Heating (Tasks 14, 19, 26, and 44)
- Solar Cooling (Tasks 25, 38, 48, and 53)
- Solar Heat or Industrial or Agricultural Processes (Tasks 29, 33, and 49)
- Solar District Heating (Tasks 7 and 45)
- Solar Buildings/Architecture/Urban Planning (Tasks 8, 11, 12, 13, 20, 22, 23, 28, 37, 40, 41, 47, 51, and 52)
- Solar Thermal & PV (Tasks 16 and 35)
- Daylighting/Lighting (Tasks 21, 31, and 50)
- Materials/Components for Solar Heating and Cooling (Tasks 2, 3, 6, 10, 18, 27, and 39)
- Standards, Certification, and Test Methods (Tasks 14, 24, 34, and 43)
- Resource Assessment (Tasks 1, 4, 5, 9, 17, 36, and 46)
- Storage of Solar Heat (Tasks 7, 32, and 42)

In addition to the project work, a number of special activities – Memorandum of Understanding with solar thermal trade organizations, statistics collection and analysis, conferences, and workshops – have been undertaken. An annual international conference on *Solar Heating and Cooling for Buildings and Industry* was launched in 2012. The first of these conferences, SHC2012, was held in San Francisco, CA.

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