

Contents

1	Introduction	1
2	Microeconomic and Macroeconomic Issues in the Power Intensive Industry	5
2.1	Norðurál, Century Aluminum	6
2.2	Rio Tinto Alcan Iceland	7
2.3	Alcoa Fjarðaál	9
2.4	Elkem	9
2.5	Becromal	13
2.6	New Potential Firms	13
2.7	Silicor Materials	16
2.8	PCC Silicon Metal Production Plant	17
2.9	United Silicon	17
3	The Power Intensive Industry, from the International Economic Perspective	19
4	The Hydropower Application	25
5	The Geothermal Application	33
6	The Importance of Renewable Energy for the Power Intensive Industry, from an Economic Perspective	41
6.1	The Heckman Two-step Procedure	43
6.1.1	Data	46
6.1.2	Model Setup	47
6.1.3	Variable Definition and Regression Results	47

7 The CarbFix Procedure	51
8 The SulFix Procedure	59
Glossary	67
References	75

Economics and Power-intensive Industries

Kristjánsdóttir, H.

2014, VIII, 77 p. 54 illus., 48 illus. in color., Softcover

ISBN: 978-3-319-12939-6