Inhalt

Foreword by Wolfgang Eberhardt Foreword by Hermann Hess		9
		12
1	Introduction	15
2	Consequences of global warming	19
	Heat	20
	Sea level rise	21
	Storms	21
	Droughts	22
	Heavy rain	23
	Glacier melt	24
	Greening the earth	25
	Higher crop yields	26
3	Plan A: Reducing greenhouse gas emissions	27
4	Population and poverty	31
5	Coal, oil, gas and uranium	35
6	Renewable energies	37



7	The greenhouse effect	41
8	The climate in the earth's past	49
9	The sink model	57
10	Capacity of the natural sinks	63
11	Ocean sink	69
	An Earth without oceans would be like Venus	69
	How carbon dioxide was converted into limestone	
	over eons	70
	Why the ocean sink will not fail	72
	The acidification of the oceans and the dissolution	
	of mussel shells	73
	Carbon dioxide and water: a little basic knowledge	75
	The equilibrium model for oceans and atmosphere	77
	Could warming oceans become CO ₂ emitters?	79
	The main argument against the equilibrium model	80
12	Land Sink	83
	Net and gross primary production	84
	The balance of land plants	84
	The Amazon rainforest: sink or source?	86
	The earth turns green	87
	Reasons for the increased sink capacity	89
	The future of the land sink	94
13	Methane	97
	Methane sources and sinks	100
	Equal treatment of methane and CO ₂	102
	Factor 28	103
	Methane plateau at the turn of the millennium	104
	The current rise in methane concentrations	105

	Satellite data	105
	Strategies to get the methane problem under control	107
14	Increasing the sink capacity	109
	Increase in ocean sink capacity	109
	Increase in land sink capacity	115
15	Budget model versus sink model	121
	Basics of the budget model	122
	The correlation between cumulative emissions and	
	the rise in temperature	123
16	Arguments against Plan B	125
17	The residence time of carbon dioxide:	
	an intriguing argument	135
18	Plan B	139
19	What happens if we do nothing?	145
20	Summary	151
References		