## Contents

List of figures			
	List of tables		
	List of contributors		
	Foreword		
1	Bottom-up approaches towards a global climate agreement:		
	an overview	1	
	Carlo Carraro, Christian Egenhofer and Noriko Fujiwara		
2	Regional and sub-global climate blocs: a cost-benefit analysis		
	of bottom-up climate regimes	16	
	Barbara Buchner and Carlo Carraro		
3	Do regional integration approaches hold lessons for climate		
	change regime formation? The case of differentiated		
	integration in Europe	42	
	Noriko Fujiwara and Christian Egenhofer		
4	Trade, the environment and climate change: multilateral versus		
	regional agreements	70	
	David Kernohan and Enrica De Cian		
5	Participation incentives and technological change: from		
	top-down to bottom-up climate agreements	94	
	Barbara Buchner and Carlo Carraro		
6	Bottom-up approaches to climate change control: some policy		
	conclusions	116	
	Carlo Carraro and Christian Egenhofer		
Inc	Index		

## Figures

2.1	A climate regime with two blocs:	
	(1) the EU and the FSU; (2) Japan and China	22
2.2	A second climate regime with two blocs:	
	(1) the US and the FSU; (2) the EU and Japan	25
2.3	A third climate regime with two blocs:	
	(1) the US and China; (2) the EU, the FSU and Japan	27
4.1	Institutional deepening versus widening in regional integration	79
5.1	Changes of R&D investments in the US in various potential	
	post-2012 climate regimes	105
5.2	Changes of R&D investments in Japan and the EU in various	
	potential post-2012 climate regimes	107
5.3	Changes of R&D investments in China and Russia in various	
	potential post-2012 climate regimes	109
	<del>-</del>	

## **Tables**

3.1	UNFCCC versus EU model of regionalization	44
3.2	Three dimensions of external relations in the EU model of regionalization	47
3.3	UNFCCC and EU differentiation and progressive engagement	
	models (overview)	59
4.1	Length of trade rounds	73
4.2	Environmental provisions in trading blocs	85
4.3	Environmental provisions in the inter-bloc agreements	87
5.1	Implications of potential post-2012 climate regimes for key	
	variables in the US in the year 2050	106
5.2	Implications of potential post-2012 climate regimes for key	
	variables in the EU and Japan in the year 2050	107
5.3	Implications of potential post-2012 climate regimes for key	
	variables in China and Russia in the year 2050	109