

CLIMATE CHANGE ASPECTS IN THE STRATEGIC ENVIRONMENTAL ASSESSMENT IN SERBIA

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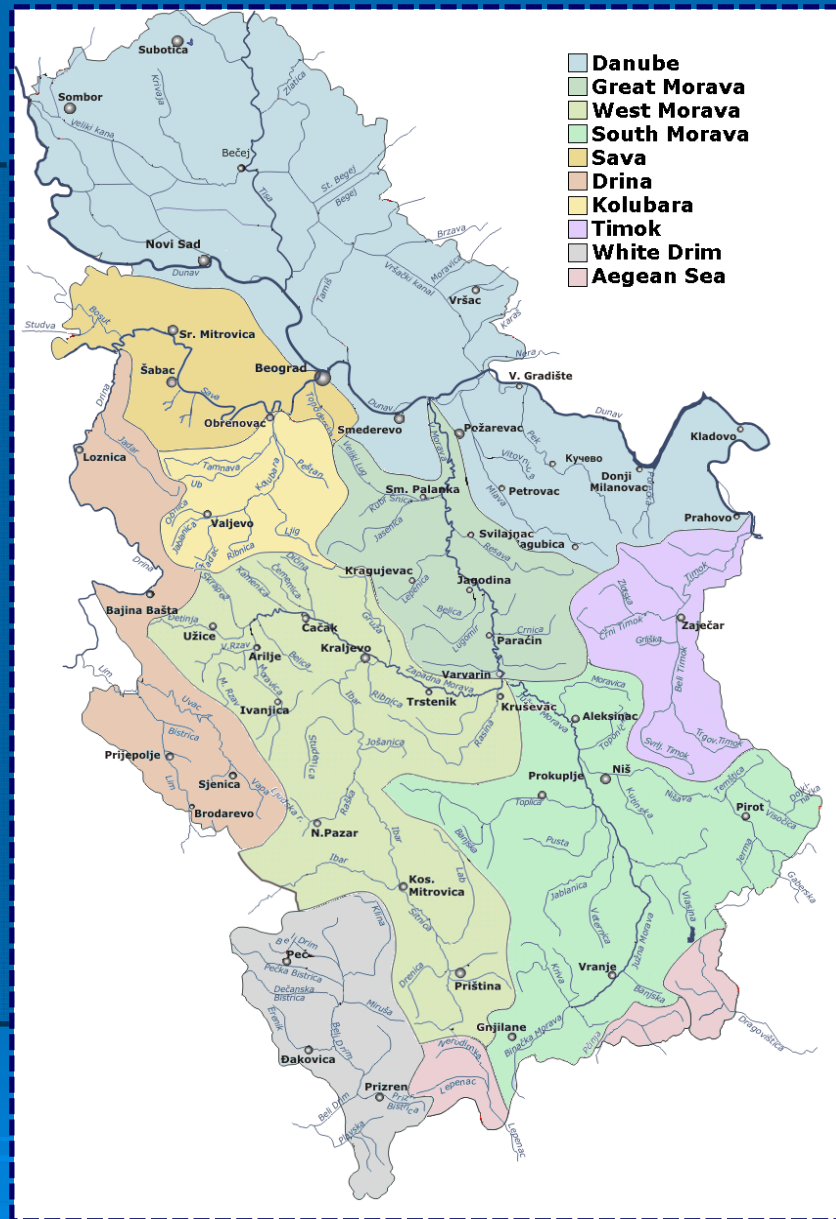


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CLIMATE CHANGE ASPECTS IN THE SEA IN SERBIA

INTRODUCTION

Environmental protection legal framework in Serbia is harmonised with EU legislation:

- ❖ Environmental protection Act (OG of RS, 135/2004)
- ❖ Strategic Environmental Impact Assessment (SEIA) Act –(OG of RS, 135/2004)



14 SECTORS (spatial planning, energy, water management, transport, waste management, etc.)



INTRODUCTION (cont'd)

SEIA Act symbolises strategic tool for EM since environmental protection issues judged at the highest decision making levels should be addressed, evaluated and communicated in

ENVIRONMENTAL REPORT



PROPOSES ALTERNATIVE MEASURES THAT WOULD REDUCE POTENTIAL ADVERSE EFFECTS based on identified issues and constrains

Climate parameters are specified as one of the factors with likely significant impact that need to be considered with other issues and constrains of relevance



METHODOLOGY

IDENTIFICATION AND CATEGORIZATION of SEA reports (243):

- ❖ Republic agency for spatial planning;
- ❖ Department for environmental protection Belgrade;
- ❖ Institute of Architecture and Urban & Spatial Planning of Serbia; and
- ❖ Web search using the terms "Environmental assessment" and SEA report

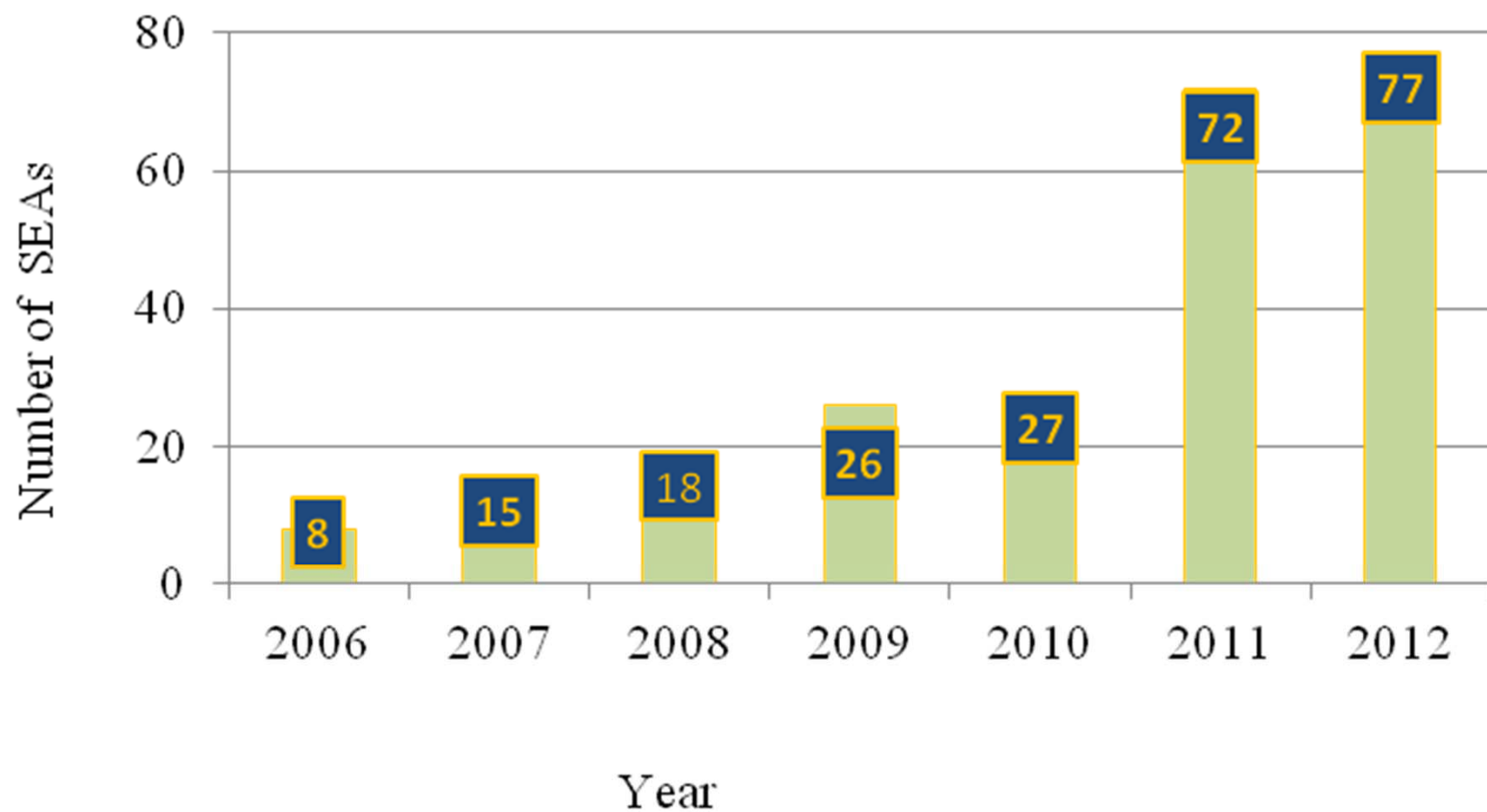
PRELIMINARY REVIEW of available reports (43)

DETAILED ASSESSMENT framework main topics (in line with SEIA Act (Official Gazette of the RS, 2004):

- ❖ Description of the state environment (Baseline)
- ❖ General and specific objectives and selection of indicators (Objectives and indicators)
- ❖ Assessment of potential impact (Impact assessment)
- ❖ Description of mitigation measures (Mitigation)



RESULTS



RESULTS (cont'd)

Published In	SEA per Plan type					No of plans
	Regional spatial plan	Sectoral spatial plan	Municipal spatial plan	Local Land Use Plan	Waste managem. plan	
2006	-	1	2	5	-	8
2007	-	-	6	9	1	16
2008	-	2	6	10	-	18
2009	-	6	8	12	-	26
2010	2	6	14	4	1	27
2011	3	5	54	8	2	72
2012	1	12	51	12	-	76
Total	6	32	141	60	4	243



RESULTS (cont'd)

SEA reports preliminary review

- ❖ SEA reports : **16** institutions and consulting companies.
- ❖ **6** institutions prepared **79%** of all reports with majority of them (**41%**) developed by the Serbian Institute for Architecture and Urban & Spatial Planning.
- ❖ The number of SEA reports pages varies from **41** for local regulation plans to **217** pages for spatial plan for infrastructural corridor.
- ❖ The average number of pages is **96**.

Based on review 30 reports incorporate one or more climatic factors &/or climate change parameters.



RESULTS (cont'd)

% of SEAs addressing climatic factors by type of plan and topic area

Type of plan	No. of SEAs	Baseline	Objectives /indicators	IA	Mitigation	Monitoring	Average (%)
Regional spatial	3	67	100	67	30	30	59
Sectoral spatial	5	80	60	60	0	30	46
Municipal spatial	13	85	77	31	31	31	51
Local land use	5	80	40	40	40	40	48
Waste management	4	100	50	100	100	100	100
Average (%)	100	82	65	60	40	46	61



CONCLUSIONS

- ❖ **Upward trend in SEIA application in Serbia.**
- ❖ **Majority of reviewed reports refer to the spatial and land use planning (239) while only four addressed waste management planning.**
- ❖ **Reports are prepared by 16 institutions and consultants**
- ❖ **A review shows that approximately 70% reports contains one or more data on climatic factors or climate change parameters.**
- ❖ **Variations in the SEIA:**
for waste management plans included in each topic area (100 %), regional spatial plans (59%), municipal plans (51 %), local land use plans (48 %), and in sectoral spatial plans (46 %).



CONCLUSIONS (cont'd)

- ❖ **Consideration of climate change aspects in the SEA is insufficient;**
- ❖ **It is necessary to include climate change in a more comprehensive and systematic manner.**

Results correspond to similar studies for United Kingdom (Posas P., 2011) & Denmark (Larsen S. et al., 2012.2013)

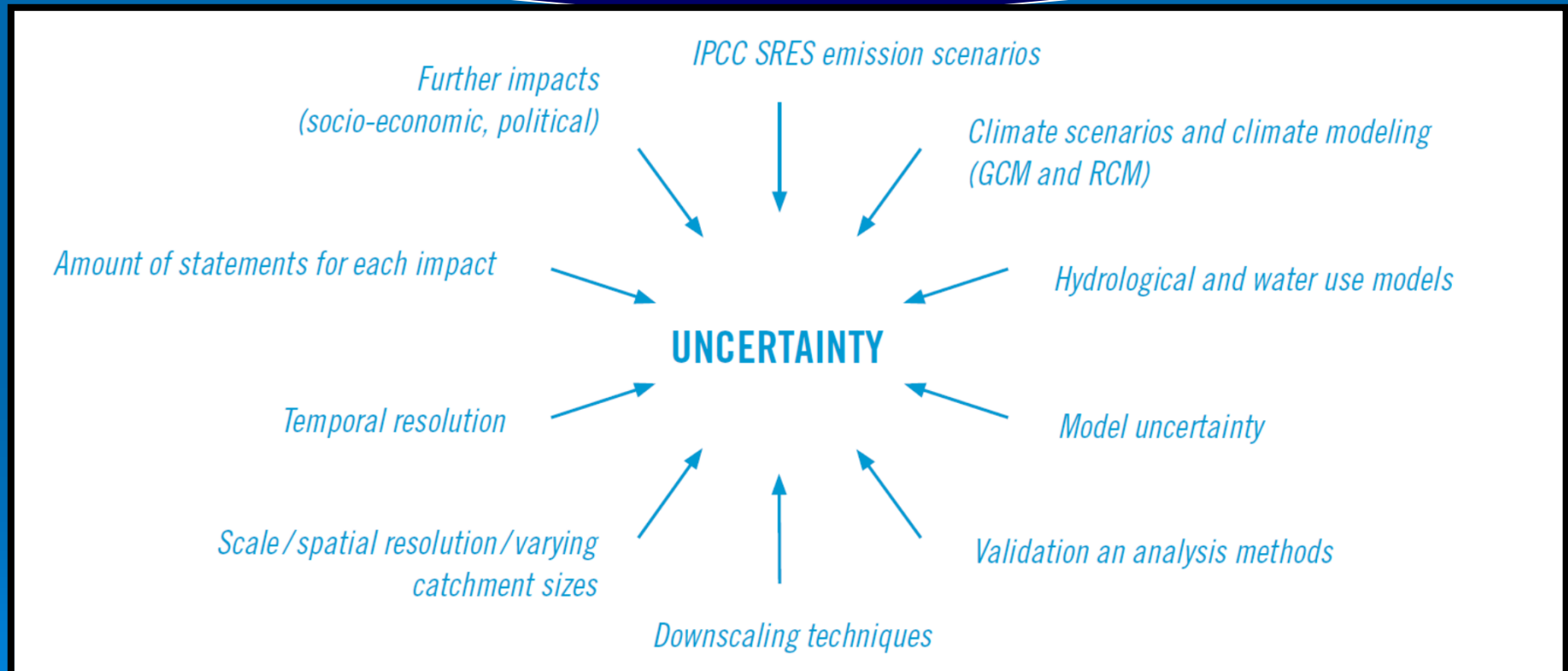
- ❖ **The Serbian Water Act indicates list of planning documents that require SEIA in water management, but process is still pending.**
- ❖ **This is of particular interest given the potential CC influences on hydrological cycle and uncertainty associated with future projections.**



CONCLUSIONS (cont'd)

CONFIDENCE AND UNCERTAINTIES

Main factors influencing uncertainty in climate change analysis
(Source: ICPDR Strategy on Adaptation to Climate Change)



THANK YOU



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"Water for Sustainable Development
and Adaptation to Climate Change"

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