



Raymond Charles Rauscher  
Salim Momtaz

# Sustainable Communities: A Framework for Planning

Case Study of an Australian Outer  
Sydney Growth Area

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Raymond Charles Rauscher  
Habitat Associate for Arts  
and Environment  
East Gosford, NSW, Australia

Salim Momtaz  
School of Environmental and Life Sciences  
University of Newcastle  
Callaghan, NSW, Australia

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Greenfield area of an outer Sydney suburb taken by Ray Charles Rauscher

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*We dedicate this book to the Tom Farrell  
Institute for Environment of the University of  
Newcastle, Australia ([www.newcastle.edu.au/  
research-centre/tfi](http://www.newcastle.edu.au/research-centre/tfi)). The Institute is thanked  
for the support that it extends to academics  
and the wider community in furthering efforts  
to protect and enhance the environment.*



# Preface

This book is partly a response to the increasing numbers of people expressing concerns over a number of environmental issues such as impact of climate change; carbon emissions; pressures from overpopulation of cities; coal seam gas extraction; and, depleting natural resources. Governments, in response, are trying to develop policies to address these concerns. The authors have developed a 'sustainable communities framework' (SCF) incorporating sustainability principles (that is social/cultural, environmental and economic) within urban planning. The book can be used for research purposes or as a manual by practitioners (government or private) and community groups. The framework can be applied to different sized areas, including: local; district; local government area; or, region.

The book examines current urban planning schools, such as: land use planning; natural resource planning; and sustainable urban planning. The authors focus on the extent that these schools incorporate principles of sustainability within urban planning. The authors critique the extent that current planning practices are moving towards a more coordinated and holistic framework in incorporating sustainability principles.

The authors propose a five (5) step SCF built on an application of sustainability tables. A wide range of urban planning practices utilising sustainability criteria are examined. Both qualitative (i.e. a SCF survey step) and quantitative (i.e. a SCF sustainability scorecard) tools are outlined within the framework. To guide the reader the framework is applied to a case study outer Sydney growth area of Wyong Shire, Central Coast, NSW, Australia.

The authors address the question of how best to measure the environment by presenting a table for selecting indicators of sustainability. Sustainability scorecards to record these indicators of sustainability are then outlined. Within the scorecards are sustainability ratings (using green, amber and red). The authors show how aggregating (scaling up) these ratings allows the framework to be applied to larger areas such a districts. Finally, the authors outline how scorecards can be used within sustainability reports (with actions and monitoring components) for a subject area.

In assisting the reader, the authors draw a future scenario on the application of the SCF to incorporate principles of sustainability into urban planning. Finally, readers



will be interested in future options for applications of the SCF, including: (1) adopting a systems program; (2) environmental performance monitoring and (3) showing how the framework will accommodate the social/cultural and economic components of sustainability, in addition to the environmental ones as examined in the case study presented in the book.

Gosford, NSW, Australia  
Callaghan, NSW, Australia

Raymond Charles Rauscher  
Salim Momtaz

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# Contents

<b>1 Introduction to Sustainability</b> .....	1
1.1 Defining Sustainability.....	1
1.2 Chapter Summary.....	4
References.....	4
<b>2 Sustainability and Urban Planning</b> .....	5
2.1 Sustainability and ESD .....	5
2.2 ESD Related Documents.....	7
2.2.1 International.....	7
2.2.2 International Non-government Organisations (NGOs).....	11
2.2.3 Commonwealth.....	14
2.2.4 NSW State .....	19
2.3 ESD Based Urban Planning Frameworks .....	25
2.3.1 Land Use Planning.....	25
2.3.2 Natural Resource Planning .....	27
2.3.3 Sustainable Urban Planning.....	29
2.4 Chapter Summary.....	31
References.....	32
<b>3 Sustainable Communities Framework (SCF)</b> .....	37
3.1 SCF Structure.....	37
3.2 Chapter Summary.....	43
References.....	44
<b>4 Data Sources and Indicators of Sustainability</b> .....	45
4.1 Searching Data Sources.....	45
4.2 Indicators of Sustainability .....	51
4.3 Chapter Summary.....	55
References.....	55

**5 Examining the Study Area** ..... 57

5.1 Background to Study Area ..... 57

5.2 Study Area and Planning..... 60

5.2.1 Greater Metropolitan Region Planning..... 60

5.2.2 Central Coast Planning ..... 64

5.2.3 Wyong Shire Planning ..... 64

5.3 Chapter Summary..... 70

References..... 70

**6 Applying the SCF to the Natural Environment**..... 73

6.1 Step 1: Review ESD Related Documents..... 73

6.2 Step 2: Selecting Indicators of Sustainability ..... 73

6.3 Step 3: Area Survey..... 73

6.4 Steps 4 and 5: Complete Sustainability Score  
Cards and Sustainability Reports ..... 82

6.5 Aggregating Sustainability Score Cards ..... 87

6.6 Chapter Summary..... 92

References..... 92

**7 Applying the SCF to the Built Environment** ..... 93

7.1 Step 1: Review ESD Related Documents..... 93

7.2 Step 2: Selecting Indicators of Sustainability ..... 94

7.3 Step 3: Survey Area..... 94

7.4 Step 4: Completing a Sustainability Score Card..... 94

7.5 Step 5: Adopting Sustainability Report..... 97

7.6 Aggregating Sustainability Score Cards ..... 97

7.7 Chapter Summary..... 99

References..... 100

**8 Future Applications of SCF** ..... 101

8.1 Overview of SCF Application..... 101

8.2 Research to Expand the SCF..... 103

References..... 105

**Appendices**..... 107

Appendix A: ESD Principles Built into Eco-Village Design..... 107

Appendix B: GMR Urban Growth 1973–2004  
and Environmental Footprint ..... 111

Appendix C: Draft Central Coast Regional Strategy ..... 112

Appendix D: Built Environment Simulation Model Projections ..... 113

Appendix E: Sustainable Urban Planning Web Sites (Updated to Book  
Printing Date, Please Inform Authors of Any Change via Email) ..... 114

**Glossary** ..... 119

**About the Authors**..... 123

**Index**..... 125

# Acronyms

ABS	Australian Bureau of Statistics
ACF	Australian Conservation Foundation
BASIX	Building Sustainability Index
CAP	Catchment Action Plan
CCWA	Central Coast Water Authority (was GWJWA, Gosford Wyong Joint Water Authority)
CMA	Catchment Management Authority
CSIRO	Commonwealth Services in Industry and Research Organisation
CuM	Cubic metres
DECC	Department of Environment and Climate Change
DEH	Department of Environment and Heritage (was DECC)
DIPNR	Department of Planning and Natural Resources (was Planning NSW)
DoP	Department of Planning (was DIPNR)
DoPI	Department of Planning and Infrastructure (was DoP) (Department of Planning)
EA	Environment Australia
ESD	Ecologically sustainable development
GMR	Greater Metropolitan Region of Sydney
GWJWA	Gosford Wyong Joint Water Authority
HCRCMA	Hunter Coast Rivers Catchment Management Authority
ICLEI	International Council for Local Environmental Initiatives
IUCNRR	International Union for Conservation of Nature and Natural Resources
LA21	Local Agenda 21
LEP	Local environmental plan
LG	Local government
LGA	Local government area
LHCCREMS	Lower Hunter Central Coast Regional Environment Management Study
NABERS	National Australian Built Environment Ratings System
NEMP	Newcastle Environmental Management Plan

NGO	Non-government Organisation
NHT	Natural Heritage Trust
NSW	New South Wales
OEH	Office of Environment and Heritage
PNSW	Planning NSW
PVP	Property Vegetation Plan
SCF	Sustainable communities framework
SEDA	Sustainable Energy Development Agency (NSW)
SoE	State of Environment
TBL	Triple bottom line
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WSC	Wyong Shire Council
WWF	World Wildlife Fund