



北京林业大学经济管理学院

“英才计划”出版工程

编委会主任：陈建成

主编：温亚利 张卫民

# 气候变化背景下的 绿色采购管理研究

GREEN PROCUREMENT MANAGEMENT RESEARCH AGAINST  
THE BACKGROUND OF CLIMATE CHANGE

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中国林业出版社



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# 出版说明

## Publication Introduction

为加强学院科研团队建设，培养经济管理青年英才，扩大学院学术交流和学术影响，产出高水平标志性成果，促进学院重点学科与基础学科的协调发展，全面提升学院整体学术竞争力和影响力，北京林业大学经济管理学院制定了“英才计划”，该计划由“创新团队工程”、“出版工程”、“奖励工程”和“论坛工程”四个建设项目组成。

“英才计划”出版工程是对学院教师完成的，以农林经济管理学科领域为主、包括学院其他学科领域中的具有重要理论意义或重大应用价值及前景，或具有独到见解或新颖体系，对科学发展有重要作用的专著出版提供资助，目的是鼓励学术创新、传播学术思想、加强学术交流、繁荣学术研究、促进学术研究更好地服务社会。

“英才计划”出版工程得到了北京东方园林股份有限公司副总经理梁明武、湖南省汨罗市长江铜业有限公司董事长余方然以及中国林业出版社的大力支持，特此鸣谢！

School of Economics and Management(SEM) of Beijing Forestry University (BFU) launched Cultivating Talents Programs including Innovation Team Project, Publication Program, Award Program and Forum Project, which aims to enhance the research team of school, to cultivate young faculties in economics and management to output high level benchmark achievement.

Cultivating Talents Program-Publication Program provide support to manuscript with significance or critical application value or prospective, or with original idea or innovative system mainly agro-forestry economics and management field and other fields completed by school faculty members

Publication Program acknowledge the great support of Mr. Liang Mingwu ( Vice president of Beijing Oriental Garden Shares Co. Ltd), Mr. Yu Fangran (Chairman of Changjiang Copper Product Co. Ltd in Miluo city) and China Forestry Publishing House.

北京林业大学经济管理学院  
“英才计划”出版工程编委会  
2011年5月10日

# 序 言

多年来,北京林业大学经济管理学院以建设和培育国家重点学科——林业经济管理学科为目标,抢抓机遇,深化改革,瞄准学科发展前沿,凝聚全院师生智慧,激发一切可利用资源的活力,团结一致,与时俱进,精思厚德,以人为本,科学发展,敢为人先,在教学、科研、人才培养和社会服务诸方面取得了显著进步。仅2010年,学院在高层次科研项目数量、科研经费总量、高质量学术论文数量、学生获奖层次、本科教学质量评价、专业学位建设等6方面实现突破,创学院历史最好成绩。2010年学院获得国家自然科学基金、国家社科基金和教育部人文社科基金等国家级课题7项;被SCI、EI和ISTP三大检索系统检索的论文共33篇;学院教师获全校理论课教学质量评价第一名;学院学生获“全国先进班集体”称号和58项省级以上学科竞赛奖;学院新增工商管理硕士(MBA)、应用统计硕士、会计硕士、国际商务硕士四个专业硕士学位授权学科点。这些成绩的取得,为学院的改革和发展奠定了良好的基础。

为了进一步推动学院在“十二五”期间快速发展,从2010年起,学院计划用五年时间,在全院推进“英才计划”建设项目。该计划包括“创新团队工程”、“出版工程”、“奖励工程”和“论坛工程”四个建设工程。“创新团队工程”旨在林业经济管理重点学科和其他具有优势和潜力的学科领域,以突出重点团队建设及领军人才培养、突出高水平标志性成果产出为原则,组建学术研究团队,择优提供研究费用资助。“出版工程”旨在鼓励学术创新、传播学术思想、扩大学术影响,资助学院教师多出具有影响力的学术专著。“奖励工程”旨在引导和激励教师申报高层次科研项目、产出高水平学术成果,鼓励教师关心学院发展、积极投身学院教学和科研工作,对在科研、教学和学院发展中取得突出成绩的教师进行奖励。“论坛工程”旨在营造学术氛围、加强学术交流、凝聚学术智慧、扩大学术视野、提倡学术创新,举办各种形式的学术论坛。

“出版工程”作为“英才计划”的重要组成部分,其实施范围在兼顾学院各学科领域的基础上,适当向林业经济管理学科领域倾斜。众所周知,林业经济管理学科在国家生态建设、低碳经济发展及现代林业体系构建中承担越来越重要的人才培养及科学研究责任。北京林业大学林业经济管理学科作为全国同类学科中唯一的国家重点培育学科,在林业经济理论研究方面长期积累,形

## 序 言

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成具有中国特色的林业经济管理学术体系，在林业经济管理学科发展，以及参与国家林业重大问题、前沿和热点问题研究中发挥了积极作用。为促进学科发展，提升学科服务于社会发展的水平，北林林业经济管理学科正努力开展林业经济理论系统研究，以及林业经济重大问题的持续研究，尝试对中国林业经济发展进行理论与实践的梳理和总结，更好地为中国林业发展发挥理论指导作用。

“英才计划”出版工程项目将系统、全面地向社会介绍北林林业经济管理学科及相关学科领域最新的研究成果。主要涉及林业经济管理基础理论，林业经济重点和热点问题，国内外林业经济与政策比较，以及经济学、管理学和政策学最新研究成果在林业上的应用等方面。这些著作中既有青年教师在博士论文基础上形成的最新著作，也有教师最新科学研究成果。该出版工程不求研究内容及形式的系统性和完整性，更注重创新性及探索性；特别是对于新时期中国林业发展与社会经济可持续发展关系、林业在应对全球气候变化中的经济与生态环境政策、当前中国改革与发展中涉及林业与生态环境的关键经济政策问题的创新性研究给予高度重视。

这些著作大多是我校经管院中青年林业经济工作者的研究成果，在学术上可能还有不尽完善之处，一些问题在学术界可能也有不同观点，我以为，实施该出版工程的根本目的是繁荣中国林业经济管理研究，鼓励学术创新，勇于探索林业经济重大问题，更好地为中国林业经济发展服务，同时使有志于中国林业经济研究的广大中青年林业经济工作者有机会发表自己的成果，与学术界交流、沟通和争鸣，提升他们的学术水平，为中国林业发展奠定人才基础。

北京林业大学校长

**宋维明**

2011年5月16日

# Foreword

Over the years, School of Economics and Management (SEM) of Beijing Forestry University (BFU) has made a great progress with an aim of building and fostering the national key discipline - forestry economics and management. We seize the opportunity, deepen the reform, aiming at the development of frontier subjects and gather all the wisdom and inspire all available resources and energy of teachers and students. We realize a scientific development, going forward with the times and people-oriented in teaching, research, personnel training and social service. In 2010, SEM got a breakthrough of history because we got 7 major projects from National Natural Science Foundation project, the National Social Science Fund and the Ministry of Education, Humanities and Social Science Fund and other national projects. About 33 papers were cited by SCI, EI and ISTP, with students winning the National Advanced Course Collective and more than 58 provincial level of academic competition awards. Four new programs of graduate studies were approved including Master of Business Administration (MBA), Master of Applied Statistics, Master of Accounting, Master of International Business. All the above achievements have laid a good foundation for the reform and development of SEM.

In order to further promote the development of college in the Twelfth Five-Year Period, from 2010, the college plans to use five years to promote Cultivating Talents Programs. The plan includes Innovation Team Project, Publication Program, Award Program and Forum Project. Innovation Team Project aims to focus on economic management in forestry and other disciplines which have advantages and potentials to highlight the building of the key leader in team and personnel training, highlighting the high level output of the principle of the landmark achievements and provide funds to the formation of research teams in the selection of the best research. Publication Program is to encourage academic innovation, disseminate of academic thinking, and expand academic impact of SEM by funding the publication of academic achievements made by teachers. Award Project aims to guide and encourage the teachers to apply for high-level scientific research projects, and academic achievement of high level, encourage teachers to care about development of the institute by taking an active part in university teaching and research work. Forum Project aims to create academic atmosphere, strengthen academic exchanges and combine academic intelligence by expanding academic horizons and holding various forms of academic forums.

Publication Program is an important part of Cultivating Talents Programs, which will put emphasis on economic management disciplines with the scope of all various disciplines in SEM. As we all know, forestry economics and management assumes an

## Foreword

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increasingly important responsibility for personnel training and scientific research in the national ecological construction, low-carbon economic development and construction of modern forestry system. Forestry economics and management of BFU, as the only nation greatly supported in all similar universities, has formed an academic system of the forestry economy with Chinese characteristics with long-term accumulation, and played an active role in the development of economic management disciplines and participation in national forestry major issues and hot issues of frontier. To promote academic development and enhance academic services to the community, economics and management disciplines of BFU are working to carry out systematic study on forestry economic system theory and continuous study on major forestry economics issues, trying to summarize and sort out the Chinese forestry economic development in both theory and practice to play a better role in guiding the development of forestry in China.

Publication Program will make a comprehensive introduction of the latest achievements in forestry economics and related disciplines to the society, including forestry management based on economic theory, economic priorities and hot issues in forestry, domestic and international comparison of forestry economics and policy, as well as economics, management and policy studies on the latest academic achievements in the forestry aspects of the application. All of these works include the latest work based on doctoral thesis of young teachers and the latest scientific research of teachers of SEM.

The publication does not seek a systematic integrity in the content and form, just to put more on innovative and exploratory research, particularly focuses on the relationship of forestry development in new period and sustainable economic and social development, including the global climate change in response to the economic and environmental policies, China's current reform and development related to forestry and ecological environment, etc.

These works are mostly works of young research workers in forest economics of SEM of BFU. They may not be quite complete and there may be different point of view in the academia, but our purposes are to make the research of forestry economics more prosperous, encourage academic innovation, the courage to explore major issues of forestry economy and better economic development of China's forestry services, which will give chances to young researchers in forestry economics to publish their achievements, and push the exchanges and communication and contention to improve their academic standards for laying a base of talents for forestry development in China.

President of Beijing Forestry University

**Song Weiming**

May 16, 2011



# 前言

全球气候变化正在对世界各国产生日益重大而深远的影响，受到国际社会的普遍关注。

国际社会之所以关注全球气候变化问题，就在于气候变化已经不仅仅是科学问题，也已演变为经济和政治问题。国际上许多国家都在充分利用全球气候变化研究已经获得的多方面成果，为本国或本地区制定政策和行为以降低未来气候与环境变化对自身影响的不确定性，减少自然灾害造成的损失，促进社会可持续发展。近年来，绿色采购作为全球可持续消费和生产的起始环节，在一些国家得到了快速发展。为了鼓励可持续消费，不仅需要引导和鼓励企业开发质量和环境性能双优的环境友好产品，最大程度的降低产品生产、使用、废弃处理等整个生命周期过程的环境影响；更需要社会的各组成部分如政府管理部门，非政府组织机构、企业和社会团体都以一种环境友好的态度从事各类消费活动。在国际绿色采购网络 (IGPN) 2008 年八国峰会声明中提出，只有通过可持续生产和消费，才能更好地应对气候变化的后果，在全球市场上实现可持续未来；认为推广绿色采购在保护环境和发展经济中的角色非常关键，并建议各国立即采取行动：建立绿色采购法，促进环境创新，为环保产品创造市场份额。越来越多的国家将绿色采购作为应对气候变化、进而实现可持续发展的一个重要经济手段。在政府方面，政府绿色采购计划因其庞大的采购计划以及突出的示范指导意义，其实施成效备受各界瞩目。丹麦、德国和日本等国都已在政府绿色采购领域开展了较多工作，通过颁布绿色采购的法令、发布实施手册和绿色采购清单等方式开展了一系列推动政府绿色采购的工作，在企业方面，越来越多的企业承担起企业社会责任，意识到只用货币形式来评价采购效果是相当片面的，绿色采购管理的背后，是对商业活动的环境管理，是企业作为社会重要组成部分要承担的生态义务。

气候变化对我国的影响也是巨大的，我国近年来积极推进减缓气候变化的政策和行动，大力发展低碳经济和循环经济。国家环保总局 2006 年筹建了中国绿色采购网络 (CGPN)，旨在促进我国的可持续生产和可持续消费，为中国政府、团体和企业等组织的绿色采购提供产品支持、技术支持和信息支持，积极开展绿色采购的国际合作。2006 年 11 月，我国颁布了《环境标志产品政

府采购清单》，于2008年1月1日起在全国全面实行，表明了我国政府通过绿色政府采购推动循环经济和可持续发展的决心。

本书以气候变化的状况及影响为背景，在国内外绿色采购及其管理各项研究成果的基础上，探讨了“绿色采购”的理论及各国的实践。全书的思路如下：第一章绪论对研究的背景做出介绍，包括全球气候变化的现状与趋势、气候变化带来的各种影响、绿色采购的兴起等。第二章是绿色采购的理论基础，提出可持续发展理论、环境管理和绿色供应链管理是绿色采购的理论基础。环境问题的存在和日益严重，使环境管理的相关研究发展起来，各国在进行环境管理、控制污染的同时，提出了既满足当代人需求、又不危及后代人生存的可持续发展理论；在企业层次，也提出了绿色供应链管理的理念。环境管理包括了宏观管理和微观管理，可持续发展理论主要是从社会和经济等宏观角度探讨，而绿色供应链管理理论主要是着眼于企业采购行为的微观管理。在分别总结了可持续发展、环境管理和绿色供应链管理的已有理论的基础上，阐述这些理论对绿色采购的指导作用，为后面章节对绿色采购的分析奠定了理论基础。第三章研究绿色采购管理的影响因素及其作用，探讨了影响绿色采购实现的外部因素和内部因素，并讨论了绿色采购在应对气候变化中的作用。第四章是探讨绿色采购中的供应商管理。供应商是绿色采购能否顺利实施的重要影响因素，供应商的开发和管理是整个绿色采购管理体系的重要组成部分，供应商的各方面表现也关系到采购活动的结果。第五章是对政府在绿色采购中起到的作用进行探讨。越来越多的国家倾向于采用经济手段管理环境。因此，在本章中讨论的政府对绿色采购管理的作用，也集中在主要的经济手段的分析，包括征税、补贴、政府绿色采购，以及这些政府调控手段对于推动绿色采购的作用和对各当事人的影响。第六章是气候变化背景下各国绿色采购管理实践，分析欧盟、美国、日本等国的绿色采购现状，并总结和比较其经验。第七章是我国绿色采购管理发展及存在的问题分析。第八章分析我国绿色经济与绿色采购的发展与存在的问题，包括企业绿色采购和政府绿色采购目前的不足，并针对这些问题对政府和企业给出建议。第九章是将林产品绿色采购作为典型案例进行研究。林产品绿色采购有其特殊性和必要性。林产品绿色采购在各国的实践表明，绿色采购可以成功实施，在满足采购者需求的基础上尽量减少采购活动对环境的负面影响。

在研究和写作的过程中，“绿色采购管理理论”“供应商管理”部分得到了对外经贸大学大田物流研究中心研究项目的资助，“林产品绿色采购”部分得到了美国大自然协会研究项目的资助。感谢北京林业大学宋维明校长，感

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由于绿色采购是一个比较新的课题，而研究时间有限，研究体系与研究方法处于探索阶段，希冀本书的出版可以对我国学术界的绿色采购研究起到抛砖引玉的作用，书中不足之处，请各位专家学者不吝赐教。

著 者

2012年3月30日

# Preface

Global climate change has increasingly significant and far-reaching impact on countries in the world, so the international community gives it common concern. In recent years, green procurement as an important part of the global sustainable consumption and production develop rapidly in some countries. In order to encourage sustainable consumption, it is not only necessary to guide and encourage enterprises to develop environmentally friendly products with good quality and environmental performance in order to decrease environmental impact throughout the life cycle process to the greatest degree, it is but also necessary that all sectors of society such as government departments, non-governmental organizations, businesses and community groups engaged in a wide range of consumer activities in an environmentally friendly attitude, green procurement, sustainable consumption, in order to stimulate and guide the development of sustainable production. More and more countries will regard green procurement as an important economic means to respond to climate change, and thus to achieve sustainable development. In government sectors, the government green procurement has an outstanding demonstration of guiding significance because of its massive procurement program. Denmark, Germany and Japan and other countries have carried out more work in the field of government green procurement. Behind green procurement management, there is the environmental management of commercial activities and the ecological obligation for the enterprises to bear as an important part of society.

The impact of climate change on China is huge. In recent years, China has taken a series of measures to actively promote policies and actions to mitigate climate change, develop low-carbon economy and circular economy. In 2006, State Administration of Environmental Protection built the China Green Purchasing Network (CGPN), aiming at promoting the sustainable production and sustainable consumption and providing technical and information support for the Chinese government, groups and businesses, and organizations in green procurement and actively carrying out international cooperation in green procurement.

This research discusses the theory and the practice of green procurement with climate change as the background. The ideas are as follows: The first chapter introduces the background of research, including the status and trends of global climate change and the impacts of climate change. The second chapter is the theoretical basis of the green procurement, proposed the theory of sustainable development, environmental management and green supply chain management is the theoretical basis of the green

procurement. It summarizes the sustainable development, environmental management and green supply chain management, stating the theoretical guidance on green procurement, and laid a theoretical foundation for the analysis of green procurement in the later chapters. Chapter Three discusses the influencing factors and role of green procurement, including the internal and external factors that influencing the performance of green procurement management and discuss the role of green procurement in response to climate change. The fourth chapter is to explore the supplier management in green procurement. Supplier's management is an important factor which affects the successful implementation of green procurement. The role of government green procurement discussed in Chapter Five focusing on the analysis of the major economic instruments including taxes, subsidies, green government procurement, as well as the means of government regulation for the promotion of green procurement and impacts on the related parties. Chapter Six involves the green procurement practices in different countries, analyzing green procurement status of the EU, U.S., Japan and other countries, and to summarize and compare their experience. Chapter Seven is about China's green procurement management development and problems. Chapter Eight give advices to the Government and enterprises according to problems occurred in practices of green procurement management. Chapter Nine takes forest products green procurement as a typical case.

In the process of research and writing, DTW Logistics Research Center of University of International Business and Economics and The Nature Conservancy provides research funds. The author would like to give many thanks to President Song Weiming of Beijing Forestry University. In the publication, this book got the financial assistance given by School of Economics and Management of Beijing Forestry University. In the study, the author referred to and cited a great deal of previous works, so the author wants to express her heartfelt thanks to the researchers who have conducted so many works in this field.

Green procurement is a relatively new subject while study time is limited and the research system and research methods is still at the exploratory stage, so the author just hopes the publication of the book can play a valuable role in the field of green procurement. The author sincerely hopes that experts and scholars could give advices to improve mistakes and inadequacies in this book.

**Author**

March 30, 2012



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