MEMORANDUM OF UNDERSTANDING
BETWEEN
THE MINISTRY OF HOUSING AND URBAN-RURAL DEVELOPMENT OF P.R.CHINA
AND
THE MINISTRY OF NATURAL RESOURCES, CANADA
AND
THE MINISTRY OF FORESTS AND RANGE OF BRITISH COLUMBIA, CANADA
ON APPLYING MODERN WOOD FRAME CONSTRUCTION TECHNOLOGY TO ADDRESS CLIMATE CHANGE

WHEREAS the Parties have common goals in efforts of applying innovative technologies and materials to address climate change in building energy efficiency and carbon emission reduction;

WHEREAS the Parties have reached consensus on the green, environment friendly, energy efficient and carbon emission reducing properties of modern wood frame construction;

WHEREAS the Parties have reached consensus on the application of modern wood frame technology in building energy efficiency and carbon emission reduction in China’s construction sector and to carry out relevant cooperation;

The Ministry of Housing and Urban-Rural Development of P.R. China (MOHURD) and the Ministry of Natural Resources Canada (NRCan), the Ministry of Forests and Range of British Columbia, Canada (BC Ministry of Forests) agree to enter into this Cooperation Memorandum of Understanding (MOU) on the application of modern wood frame technology in building energy efficiency and carbon emission reduction goals in China’s construction sector:

I. Cooperation Objective

In order to address climate change and to reduce building energy consumption and carbon emission, the Parties shall jointly work towards exploring wood frame solutions that meet the needs of China’s construction sector. The Parties shall jointly develop and promote modern wood frame construction technology in China through a series of collaborative activities, including conducting technical research, undertaking demonstration project(s), developing standard(s), engaging in technical cooperation and promotion, and seeking to provide a viable alternative for green, energy efficient and carbon emission reduction construction for China.

II. Approaches of Cooperation

The Parties shall establish a joint Working Committee (the “Working Committee”) upon execution of this Memorandum of Understanding to carry out work agreed under this MOU. The Chinese side hereby appoints the Chinese Society for Urban Studies as the implementation entity of this MOU.
NRCan hereby appoints Canada Wood China (CWC) and the BC Ministry of Forests and Range hereby appoints FII Consulting (Shanghai) Co., Ltd. of the Ministry of Forests and Range, British Columbia, Canada (FII China) as the implementation entities of this MOU. The Working Committee will be composed of representatives from the implementation entities of all parties. Canadian and Chinese Co-Chairs will be agreed upon before the first meeting. The Working Committee will maintain regular communications and work closely to implement this MOU and integrate wood frame technology with Chinese local construction needs and contribute as much as possible to China’s building energy efficiency and carbon emission reduction.

III. Cooperation Scope

1. The wood frame structure buildings under this MOU include but are not limited to a commercially developed 6-floor domestic or residential building using whole wood frame structure, wood-concrete hybrid structure using wood in-fill exterior wall, non-load-bearing wood partition wall, wood truss roof system and wood flooring system, etc.

2. Research and Work Plans

The Working Committee will conduct research on local needs, on properties and on the usage of wood frame structure in different urban and rural areas, in order to assess the potential of wood frame structure in China before setting up suitable quantitative targets and feasible development strategies and work plans. The Working Committee will then identify the appropriate wood frame construction types reflecting regional and local needs in China.

3. Construction of Demonstration Project

The Working Committee shall include the construction of a 6-floor wood frame structure building in Beijing in its work plan. The building will be a pioneering wood frame or hybrid building of 6 floors. In order to explore a viable and suitable wood frame solution, the pioneering project will serve as a case study for cost control and analysis, technical standards preparation, and function as a platform for technical training, exchange and demonstration. Members of all parties of the Working Committee will jointly evaluate and select the site, prepare the project implementation plan, design and build the demonstration project. The Parties will enter into a separate agreement to determine the cooperation and implementation details of the demonstration project.

4. Technical research and exchange

By working with relevant technical and administrative sectors and based on the demonstration project and current building codes and standards, the Working Committee will conduct research on technical properties of wood frame structures such as insulation, energy saving and carbon emission reduction to provide support for preparation and compiling of technical standards and fire protection requirements and for future wood frame construction. The Working Committee will also provide wood frame technology training and on-site instructions to the design, construction, inspection and project management companies to further localize the technology, seeking a tailor-made wood frame construction solution for China-based construction sector.
5. Promotion and Dissemination

The Working Committee will arrange and organize technical promotional activities, including seminars, exhibitions, visits to the demonstration project and on-site communications and will participate in the International Conference on Green and Energy-Efficient Building & New Technologies and Products Expo for technical promotion.

IV. Cooperation Funding

The Chinese and Canadian sides to this agreement will make available RMB 1,000,000 respectively as the start up funding for activities undertaken by the Working Committee. Use of the start up funds will be guided by a mutually agreed work plan and management and accountability will rest with the Working Committee. Separate funding arrangements will be negotiated and agreed to with respect to other activities under this agreement.

The Parties will enter into separate agreement(s) to further determine and finalize the details on the cooperation projects under this MOU if necessary.

The MOU is written in Chinese and English and made into three copies, each party holding one copy. The MOU is signed in Beijing, China on the 29th date of March, 2010 and shall be valid for five (5) years upon execution. The MOU can be modified and supplemented with written consent from all Parties if necessary. The MOU can be extended with agreement of all sides upon expiration.

Signatories:

Ministry of Housing and Urban-Rural Development of People’s Republic of China

Qiu Baoxing, Vice Minister

Ministry of Natural Resources Canada

Ministry of Forests and Range of British Columbia, Canada

David Mulroney, Ambassador

Patrick Bell, Minister
中华人民共和国住房和城乡建设部

与加拿大联邦政府自然资源部及加拿大卑诗省林业厅

关于采用现代木结构建筑技术应对气候变化

合作谅解备忘录

鉴于 中加双方就在建筑节能减排领域采用新技术、新材料以应对气候变化的共同努力和追求；

鉴于 经中加双方多次交流，就现代木结构具有绿色环保、节能减碳等特点达成的共识；

鉴于 中加双方对将现代木结构建筑技术应用于中国建筑节能减排领域，并进行相关友好合作所达成的共同意愿；

中华人民共和国住房和城乡建设部（“住房和城乡建设部”）与加拿大联邦政府自然资源部（“自然资源部”）及加拿大卑诗省林业厅（“卑诗省林业厅”）就共同合作，将现代木结构建筑技术应用于中国建筑节能减排领域达成如下共识，并签署本合作谅解备忘录（“备忘录”）：

一、合作目的

为应对全球气候变化，减少建筑能耗与碳排放，双方将携手探寻
适宜中国建筑需要的现代木结构体系，并通过技术研究、建设试点项目、编制技术规范、开展技术合作与推广等一系列有计划的工作，共同在中国发展并推广现代木结构建筑技术，为中国的绿色、节能、减碳建筑方案提供一种新的可行的选择。

二、合作形式

值此备忘录签订，中加双方将成立联合工作组（“工作小组”），以开展本备忘录项下约定的各项工作。中方指定中国城市科学研究会为本备忘录执行单位；自然资源部指定加拿大木业中国部（“加拿大木业”），卑诗省林业厅指定加拿大卑诗省林业厅林业发展投资处中国部（“林创中国”）作为本备忘录执行单位。各方执行单位将派员参加工作小组。工作小组首次会议前将确定工作小组中加双方联合主席。工作小组将通过定期交流沟通，密切有效地进行合作，共同推动备忘录项下内容的实施，将木结构技术与中国建筑实际需要相结合，最大限度地为中国建筑节能与减碳事业出力。

三、合作内容

1. 中加双方合作发展的木结构建筑形式包括但不限于以商业模式
开发六层全木结构民用建筑或住宅、木结构-混凝土混合结构配以木骨架组合填充外墙、木质非承重内分隔墙、木桁架屋盖系统与木结构组合楼盖系统等。

2. 调研与规划制定

工作组将调研中国城乡不同地区对木结构建筑性能及使用的具体需求，预测木结构在中国的未来发展趋势，设定合理的量化目标，制定切实可行的发展策略和工作计划，从而针对地域特征与实际需要，选择适合的木结构建筑形式进行技术推广。

3. 建设示范项目

工作组将把在北京建设一栋六层木结构建筑列入工作计划，该木结构建筑将成为首个六层的示范性木结构或混合性建筑。通过该试点项目研发可行有效的木结构建筑体系，进行成本控制与分析，为规范制订提供实际参考案例，并提供技术培训交流与展示的平台。工作组成员将共同评估和筛选项目，制定项目实施计划，设计并建设该示范项目。关于试点项目的具体合作与实施细节，中加双方将另行签订相关文件约定。
4. 技术研究与交流

工作小组将依托试点项目案例与现有标准规范，通过与相关技术与管理部门协调合作，进一步研究木结构在保温、节能、减碳等方面的技术性能，为修订木结构技术规范、防火要求及实施木结构项目提供依据。此外，工作小组将向设计、施工、监理、项目管理等单位提供木结构相关技术培训和现场技术指导，开展技术交流，在与建设单位交流的基础上将技术进一步本土化，使之更适应中国的建筑需要。

5. 推广与宣传

工作小组将筹划举办技术推广活动，包括技术研讨会、展览展示、示范项目参观、现场交流等多种形式，并将“国际绿色建筑与建筑节能大会”作为技术推广的平台之一。

四、合作资金

中加双方各出资人民币一百万元（¥1,000,000）作为工作小组开展工作的启动资金。启动资金将根据各方同意的工作计划安排使用，工作小组应管理并对启动资金负责。本协议下其它合作资金的具体安排将另行商定。
如需要，本备忘录项下具体合作项目的合作与实施细节可由中加双方另行签订相关文件约定。

本备忘录为中英双语，一式三份，各方各执一份，于2010年3月29日在中国北京签署，自签署之日起五年内有效。如有需要，经各方书面认可，可对本备忘录内容做修改和补充。至本备忘录有效期满时，各方可通过协商对备忘录进行续延。

签字方：

中华人民共和国住房和城乡建设部

仇保兴，副部长

加拿大联邦政府自然资源部

David Mulroney，大使

加拿大卑诗省林业厅

Patrick Bell，厅长