

USGBC FOREST CERTIFICATION BENCHMARKS: AN OPPORTUNITY FOR DEVELOPMENT OF CERTIFICATION STANDARDS FOR ALL BUILDING MATERIALS

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DOVETAIL PARTNERS INC.

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USGBC Forest Certification Benchmarks: An Opportunity for Development of Certification Standards for All Building Materials

Introduction

On September 15, 2009 the USGBC Materials and Resources Technical Advisory Group, with approval from the LEED Steering Committee, released the second draft of a Forest Certification Benchmark. The stated objective of the benchmark development effort is to set forth substantive requirements that forest certification systems will have to meet in order to become recognized in the LEED Green Building Rating System.

In our view, the Forest Certification Benchmarks as outlined in the second draft report are still in need of substantial revision. We believe they bring further complication to a process that was already too much so, lack sufficient clarity to allow consistent auditing, and are not likely to provide an incentive for more responsible forest management. These are problems that we believe *must* be addressed. But despite these problems we do see a significant opportunity for the USGBC – an opportunity to address an obvious and longstanding need for a certification standard for <u>all</u> materials used in building construction. The current draft, as we outline herein, provides an excellent starting point for this more substantial green building improvement.

A recent Dovetail report¹ chronicled impacts linked to sourcing of raw materials and production of building materials of all kinds. That report also highlighted the need for due diligence in the sourcing of all materials used in building construction, and not simply those that originate in forests, and noted the similarity of issues related to extraction of raw materials in general. Proposed was development of a generic standard for materials used in building construction that addresses environmental and social concerns linked to raw material extraction, transportation, processing and use. The time for such development is now and the USGBC benchmarking proposal provides a very useful tool for beginning the discussion.

Broadening Materials Certification

To illustrate both the need and the opportunity for broadening of the LEED certification credits to address a full range of building construction materials, we have examined each prerequisite and credit in the second draft of the Forest Certification Benchmark document, identifying each element that has broader applicability. In some cases we have made wording modifications to show how the draft standard could be easily adapted to achieve a wider objective.

Our assessment reveals that virtually all of the prerequisites and credits in the Forest Certification Benchmark document are applicable to raw materials in general, making it an ideal starting point for more broadly addressing concerns related to raw material sourcing, extraction, and use and related environmental, social, and economic impacts. It also offers a starting point for addressing additional concerns further from the raw materials source, including manufacturing. The draft forest certification benchmark has been reproduced below, with applicability to a broader standard indicated in the yellow shaded columns at the right. Wording changes – both suggested additions and deletions – are indicated in red.

¹ Certification of Building Materials – Important or Not? 2009. (http://www.dovetailinc.org/files/DovetailCertMat0209.pdf)
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Suggested Modifications to the USGBC Forest Certification Benchmark 2nd DRAFT to Create a Draft Certification Standard for All Building Materials

Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Prerequisite GP1	Balance	Governing structure	The entity responsible for the certification scheme has governance structures 1) designed to provide balanced representation of social, environmental and economic interests; and 2) allocate a maximum of ½ of all votes to governmental or for-profit entities with a commercial interest in the sale of basic raw materials and products.	V	√
Prerequisite GP2	Balance	Decision-making	The entity responsible for the certification scheme has policies that 1) promote consensus-based decision-making; and 2) require that balloted decisions be based on approval from at least ½ of the representatives of environmental, social, and economic interests, respectively.	V	V
Prerequisite GP3	Balance	Funding	The entity responsible for the certification scheme makes sources of funding publicly available.	$\sqrt{}$	\checkmark
Prerequisite GP4	Public input	Consultation	The policies of the entity responsible for the certification scheme require that 1) the entity solicits input on draft standards and standards revisions from a broad range of environmental, social, and economic interests, and 2) draft standards and standards undergoing revision are made available for public comment.	V	V
Prerequisite GP5	Transparency	Communication	The entity responsible for the certification scheme 1) has developed clear policies on the avenues available for participation in scheme decision-making; and 2) makes all standards and policies publicly available.	V	V
Prerequisite GP6	Continual improvement	Continuous improvement of standards	The entity responsible for the certification scheme requires that certification standards be reviewed and revised, as needed, every five years or less.	√	V

Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Credit GC1	Openness	Organizational type	The entity responsible for the certification scheme is a membership-based organization open to all organizations and individuals who demonstrate commitment to the scheme's guiding principles.	V	V
Credit GC2	Compliance with international norms	Compliance with international normative institutions	The entity responsible for the certification scheme has governance structures and procedures that are consistent with ISO and/or ISEAL codes of good governance or the equivalent.	$\sqrt{}$	V
Credit GC3	Openness	Establishment of governing body	The governing body of the entity responsible for the certification scheme is elected by the scheme's membership.	\checkmark	V
Credit GC4	Openness	Accessibility to diverse ownership types	The entity responsible for the certification scheme has standards and procedures that allow small-scale and/or low intensity operators equitable access to markets for certified forest products, and/or schemes have developed policies or other measures to improve small producer market access.	V	V
Credit GC5	Balance	Decision-making	The entity responsible for the certification scheme requires that balloted decisions be based on a majority vote from environmental, social, and economic interests, respectively.	V	V
Credit GC7	Public input	Level of standard-setting	The entity responsible for the certification scheme has developed sub-national indicators based on balanced local stakeholder input.	V	V
Credit GC8	Dispute resolution	Dispute resolution for standards-writing	The entity responsible for the certification scheme has developed formal appeals procedures that are applicable to the standard-setting process.	√	V

Prerequisite/ Credit Number	Sustainability Theme	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
	Forest extent					
Prerequisite Sp1			Extent of natural areas.	Certification schemes prohibit the conversion of forests and other wild lands to another land use, except in those cases where such conversion 1) occurs on a very limited portion of the forest management unit or natural area; 2) does not occur in forests or other natural areas of special conservation value; and/ or 3) conversion enables long-term conservation benefits.	\checkmark	V
Credit – Sc1			Carbon storage	Certification scheme standards explicitly encourage forest managers of raw material extraction activity to calculate the net carbon uptake of forest management releases that will result from extraction and associated land management activities and consider this information when developing forest strategies raw material extraction strategies including such activities as participation in larger-scale projects, monitoring forest carbon, and /or carbon certification).	V	V
	Biodiversity					
Durana are in it	<u> </u>	Landscape	Natural Avera	Contification of an arrange in the identification		
Prerequisite Sp2			Natural Areas of special conservation value	Certification schemes require the identification and maintenance and/or enhancement of the special attributes of forests natural areas of special conservation value. Such forests areas include those that 1) contain globally, regionally or nationally significant concentrations of biodiversity; 2) represent rare ecosystem types; 3) provide critical environmental services; and/or 4) are critical to providing the basic needs or traditional cultural identity of local communities. Appropriate to the scale and intensity of forest management raw material extraction and landscape impact	\checkmark	

Prerequisite/ Credit Number	Sustainability Theme Biodiversity	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
	Diodiversity	Landscape				
Prerequisite Sp3			Protected areas (non-special value forests)	Certification schemes require the protection of representative samples of existing ecosystems in their natural state, as appropriate to the scale and intensity of forest management raw material extraction activity and landscape impact and uniqueness of the affected resources.	V	
	E	cosystem diversit	y			
Prerequisite Sp4			Ecosystem structure, function, and forest successional stage	Certification schemes require the maintenance and/or restoration of the structure, function, and composition of forest and other ecosystems within the range of natural variability. Appropriate to the scale	\checkmark	V
Prerequisite Sp5			Old growth	Certification schemes in the U.S. and Canada require that the current abundance of old growth trees and old growth stand structure are maintained across the landscape, although the location of old growth stands may change over time. Schemes operating in these countries provide a definition of old growth forests that is regionally appropriate.		
Prerequisite Sp6			Plantations	Certification schemes prohibit the certification of plantations that were converted from forest natural areas after 2009 unless	√	

Prerequisite/ Credit Number	Sustainability Theme Biodiversity	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
		Ecosystem diversi	tv			
Prerequisite Sp6			Plantations	Certification schemes prohibit the certification of plantations that were converted from forest natural areas after 2009 unless	V	V
Credit – Sc2			Old growth	Certification schemes (worldwide) require that the current abundance of old growth trees and old growth stand structures are maintained across the landscape, although the location of old-growth stands may change over time. These requirements are accompanied by regionally appropriate definitions of old growth.		
Credit – Sc3			Trees/snags/ woody debris retention	Certification schemes require retention of stand- level wildlife habitat elements (snags, nest trees, etc.)		
	Spe	cies, genetic diver	sity			
Prerequisite Sp7			Species diversity	Certification schemes require the maintenance and/or restoration of habitat diversity as needed for the conservation of native species of flora and fauna.	√	V
Prerequisite Sp8			Species at risk	Certification schemes require that forest raw material extraction managers assess their properties for the presence of threatened and endangered species and, where present, develop and implement a plan to protect that habitat.	V	V

Prerequisite/ Credit Number	Sustainability Theme Biodiversity	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
		cies, genetic diver	sity			
Prerequisite Sp9			Exotics	Certification schemes require control and monitoring of the use of non-native (i.e. "exotic") species in order to avoid adverse environmental effects. The use of non-native species on a large scale is allowed only when it has been adequately demonstrated that they are non-invasive and do not have significant adverse impacts on native ecosystems.	V	V
Credit – Sc4			Genetically modified organisms (GMOs)	Certification schemes prohibit the use of genetically modified organisms.	V	V
Credit – Sc5	Forest health		Biotechnology	Certification schemes require that the use of biotechnology is consistent with the "precautionary approach" and is based on sound science and appropriate field trials.	1	
		turbance (ex. pest	ts, diseases, fire)			
Prerequisite Sp10			Management of natural disturbance	Certification schemes require the monitoring and maintenance of the health and vitality of forest and other ecosystems, including water bodies, waterways, and ground water, with consideration for the naturally-occurring role of fire, pests and other natural disturbances.	√	V

Prerequisite/ Credit Number	Sustainability Theme Forest health	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
		turbance (ex. pest	s diseases fire)			
Prerequisite Sp11			Chemical use	Certification schemes state a preference for natural methods, such as integrated pest management, to control plant and animal pests and diseases. It is required to minimize the use of chemicals, using least-toxic and narrowest-spectrum pesticides necessary to achieve management objectives. Use only pesticides registered for the intended use and applied in accordance with all label requirements. Chemicals use must be in accordance with all applicable laws.	V	V
Р	roductive function		tion			
Prerequisite	S	ustainable produc	Environmental	Certification schemes require the recognition,		
Sp12			services	maintenance and where appropriate, enhancement of the value of environmental services, provided by forests and other natural systems such as biogeochemical cycling, the protection of water supplies, and the conservation of wildlife and fisheries.	V	
Prerequisite Sp13			Restoration	Certification schemes require that forest land and raw material extraction managers reforest restore the landscape in a timely manner.	√	V

Prerequisite/ Credit Number	Sustainability Theme roductive function	Criteria s	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
	S	ustainable produc				
Prerequisite Sp14			Soil productivity	Certification schemes require that forest management-land and raw material extraction managers maintain or enhance soil productivity.	\checkmark	\checkmark
Credit – Sc6			Production of Renewable materials	Certification schemes require that timber harvest levels are sustainable over periods of ten years or less.	Criteria needs clarification; meaning not clear.	
Credit – Sc7			Non-timber forest products	Certification schemes require that the rate of removal harvest of non timber forest products does not exceed that which can be sustained over the long term.	Criteria needs clarification; may apply to all renewable materials.	
Credit Sc8			Environmental services	Certification schemes encourage managers of raw material extraction activities to consider the full range of environmental services that forests natural areas in the local area and region provide and explore alternative markets for environmental services.	V	
Credit – Sc9			Restoration	Certification schemes require that landscape restoration, including reforestation, meets targets that have been established, through credible sources, for stocking levels and time frames based on wetland, grassland, savannah, or forest type.	V	√

Prerequisite/ Credit Number	Sustainability Theme	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
I	Productive function					
Dramaguigita	S	oil and water reso		Contification ashomos require that forest land		<u> </u>
Prerequisite Sp15			Riparian protection	Certification schemes require that forest land management associated with raw material extraction activity protects the structure and function of riparian areas. To this end, schemes require the observance of state-recognized Best Management Practices where they exist. In areas without relevant regulations or Best Management Practices, schemes require the development of guidelines for the protection of riparian areas and wetlands.	V	V
Prerequisite Sp16			Physical infrastructure (roads, etc.)	Certification schemes require the minimizing of damage to forest and other ecosystems resulting from construction of roads, skid trails and other physical infrastructures. Road planning and/or road management programs are developed appropriate to the scale and intensity of forest management raw material extraction activity.	V	√
Credit – Sc10			Soil protection	Certification schemes require that forest-land management associated with raw material extraction activity minimize and mitigate disturbance and damage to soil resources.	V	V
	Socio-economic	Local communities	e e			
Prerequisite Sp17		Socal Communities	Community benefit	Certification schemes require the recognition and respect of the traditional and legal rights of local communities. They also require, appropriate to the scale and integrity of raw material extraction and land management, the promotion of the long-term health and wellbeing of communities within or adjacent to the forest management raw material extraction and land management area.	√	V

Prerequisite/ Credit Number	Sustainability Theme Socio-economic	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
		Labor				
Prerequisite Sp18			Right to organize	Certification schemes require observance of fair labor practices across all operations.	√	√
Prerequisite Sp19			Wages	Certification schemes require compliance with all applicable wage laws.	V	V
Prerequisite Sp20			Compensation	Certification schemes require that local people are given opportunities to register grievances, without threat of reprisal, and that compensation be provided for loss of, or damage to, legal and customary rights, property, resources, or livelihoods. Adequate provision of such opportunities may involve informal communications or formalized complaint mechanisms depending on such factors as existing legal frameworks and the scale and intensity of forest management raw material extraction and associated land management.	V	V
Prerequisite Sp21			Health & safety	Certification schemes require compliance with all applicable laws and regulations covering health and safety of employees and their families.	√	√

Prerequisite/ Credit Number	Sustainability Theme Socio-economic	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
	Socio-economic	Public				
Prerequisite Sp22		Tuone	Public consultation	Certification schemes require that people and groups directly affected by management operations are provided with opportunities for input and consultation. A public summary of management plans must also be made available. Public consultation and communication is appropriate to the scale and intensity of forest management raw material extraction and associated land management.	√	√
Credit – Sc11			Public consultation	Certification schemes require public consultation regarding the determination/ verification of environmental components (e.g. forests of special conservation value) and social components (e.g. cultural values and community impacts) of forest management raw material extraction and associated land management. Public consultation must explicitly include external stakeholders and experts.	V	V
Credit – Sc12			Recreation, public access	Certification schemes require that forest management raw material extraction and associated land management operations take into account impacts on recreational activities and public access (as supported by law).	V	V
Credit – Sc13			Aesthetics	Certification schemes require that forest management raw material extraction and associated land management.operations take into account the aesthetic values of forests and other natural areas.	√	√

Prerequisite/ Credit Number	Sustainability Theme	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
	Socio-economic	Equat an aration				
Prerequisite Sp23		Forest operation	Economic viability	Certification schemes require that forest raw material extraction and associated land management operations strive toward economic viability.	V	√
		Indigenous rights	}			
Credit – Sc14			Aboriginal land and tenure rights	Certification schemes require the recognition and respect of the traditional and legal rights of indigenous peoples to their lands and resources. Free and informed consent is required for other parties to manage and/or use indigenous lands and resources.	√	
Credit – Sc15			Special aboriginal sites	Certification schemes require the identification and protection of special aboriginal sites based on available documentation and, where desired by the affected tribes, the participation of those tribes.	V	
Credit – Sc16			Traditional knowledge	Certification schemes require that indigenous peoples are compensated for use of their traditional knowledge regarding indigenous species and/or management of forests and other natural areas. Free and informed consent regarding the means and amount of compensation must be obtained before the application of such knowledge.		

Prerequisite/ Credit Number	Sustainability Theme	Criteria	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Legal, inst	titutional, policy fi					
Prerequisite	<u> </u>	Legal compliance	Forest Law	Certification schemes require compliance with		
Sp24			rotest Law	all forest-land management related international agreements (within signatory countries), and forest raw material extraction and associated - related national and local laws and policies.	V	√
Prerequisite Sp25			Land tenure	Certification schemes require that property rights and land tenure are clearly defined, and that forest operators raw material extraction and associated land management operations comply with all legislation relating to property rights. As consistent with national norms for forest and other land use, schemes also require recognition and respect of the legal and customary rights of local communities to access and/or use forest and other resources.	V	
		Planning	1			
rerequisite Sp26			Management plan	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management, that forest land management plans and/or supporting documents be written and implemented that state the long-term objectives of forest management, and, consistent with those objectives, address forest resource protection, inventory, yield determination, harvesting raw material extraction practices, Silviculture, monitoring and any other major forest management activities (FAO 1998). Schemes also require that management plans be periodically revised as needed to incorporate the results of monitoring and to address changing environmental, social and economic conditions.	\checkmark	√

Prerequisite/ Credit Number Legal ins	Sustainability Theme titutions, policy fra		Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
D		Monitoring	lac			
Prerequisite Sp27			Monitoring	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management, monitoring that assesses the condition of the forest-local and regional ecosystems that may be impacted by raw material extraction, yield of forest products, and the social and environmental impacts of forest raw material extraction practices and associated land management.	√	√
	Infr	astructure and Pro	ocess			
Prerequisite Sp28			Infrastructure and process	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management: 1) responsibility is clearly assigned regarding compliance with management objectives and planning; 2) there is a mechanism for employee and public input on compliance with management objectives and planning.	√	√
		Wood sourcing				
Credit – Sc17			Procurement	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management, that forest similar products procured from outside sources are sourced from operations that observe Best Management Practices and utilize trained loggers workers. Education and outreach is conducted among non-certified operators regarding reforestation land management objectives and protection of water, soil, flora, and fauna including endangered species.	V	\checkmark

Prerequisite/ Credit Number Legal ins	Sustainability Theme titutions, policy fra	Criteria ameworks	Key Issues	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
		Training and resea				
Credit – Sc18			Training	Certification schemes require that workers be adequately trained to meet certification standards. Appropriate to the scale and intensity of forest raw material extraction and associated land management, residents within or adjacent to the forest management raw material extraction and associated management area are given opportunities for employment, training, and other services.	V	V
Credit – Sc19			Education and outreach	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management, the promotion at support of state, provincial, and other levels, mechanisms for public outreach, education, and involvement related to forest and landscape management.	V	~
Credit – Sc20			Research	Certification schemes require, appropriate to the scale and intensity of forest raw material extraction and associated land management, the provision of in-kind support of funding (individually, or through cooperative efforts of associations) for forest research to improve the health, productivity and management of forest natural resources.	V	√

Prerequisite/ Credit Number Prerequisite Cp1	General Concept Compliance with international normative institutions	Policy Criteria Compliance with international normative institutions	Requirement(s) Certification schemes require compliance with ISO 14020 and 14021 or equivalent.	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Prerequisite Cp2	Third-party	Chain of Custody system	Certification schemes require third-party claims.	V	
Prerequisite Cp3	Restrictions on non-certified material	Acceptable non-certified sources for percent-based claims	Certification schemes require due diligence to ensure that forest products labeled as certified do not contain virgin or pre-consumer recycled wood material from: 1) illegal or unauthorized sources; 2) non-certified forests raw material extraction areas of special social or environmental conservation value; 2) genetically-modified organisms, and 4) harvesting extraction activity that converts natural forests and/or other natural areas to plantations/non-forest, or that adversely impacts local or regional ecosystems.	V	
Prerequisite Cp4	Restrictions on non-certified material	Definition of legality	Certification schemes explicitly ban wood or other materials from illegal harvest in protected areas. Compliance with CITES is required.	√	
Credit Cc1	Restrictions on non-certified material	Verification of acceptable sources	Certification schemes conduct risk assessments to determine prevalence of illegal logging. Certification schemes identify wood sources from low-risk countries to be acceptable and require 2 nd or 3 rd party verification of legality for wood sourced from high-risk countries.		
Prerequisite Ap1	Accreditation Quality control	Accreditation system	Accreditation systems are specifically designed for forest raw material extraction and associated land management and chain of custody.	V	

Prerequisite/ Credit Number	General Concept Accreditation	Policy Criteria	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Prerequisite	Quality control	Surveillance of	The entity responsible for the certification scheme and/or		
Ap2	Quanty control	auditors	accreditation bodies recognized by those schemes require that surveillance audits of accredited certifiers are conducted annually, including field-based audits of a sample of certified forest raw material extraction operations.	V	V
Prerequisite Ap3	Transparency	Reporting	The entity responsible for the certification scheme and/or accreditation bodies recognized by those schemes require that accreditation and surveillance audit reports, and/or summaries of such reports, are made publicly available and include any required corrective actions or other disciplinary measures, and any complaints lodged against the certification body.	√	√
Prerequisite Ap4	Public input	Public input	The entity responsible for the certification scheme and/or accreditation bodies recognized by those schemes requires that public input be addressed regarding the performance of accredited certifiers (as part of the annual surveillance audit process).	1	V
Credit Ac1	Public input	Public input	The entity responsible for the certification scheme and/or accreditation bodies recognized by those schemes requires that public input be addressed regarding the accreditation of certifying bodies.	V	V
	Certification				
Prerequisite Ap5	Public input	Notification (of stakeholders by certifier)	The entity responsible for the certification scheme requires that certifiers provide advance notice certification audits to local stakeholders as appropriate to the scale and intensity of the forest raw material extraction operations.	V	V
Prerequisite Ap6	Public input	Consultation (of stakeholders by certifier)	The entity responsible for the certification scheme requires that certifying bodies consult with stakeholders during audits to the degree necessary to ensure compliance with standards.	V	√

Prerequisite/ Credit Number	General Concept Certification	Policy Criteria	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Prerequisite Ap7	Transparency	Public reporting	The entity responsible for the certification scheme requires that a summary of the certification report, including a summary of findings on the auditee's conformance with the management standard, is made publicly available, and includes: a description of the forest management objectives, the management system, a summary of the management plan, a summary of monitoring procedures, a description of any area of forest excluded from the scope of the certificate together with an explanation of the reason for its exclusion; a summary of the evaluation process; presentation of fundamental information to establish a connection between the central requirements of the standard and the performance of the certified operation; any discrepancies between stakeholder claims and auditor findings; the certification conclusion; and all non-compliances that must be corrected in order to maintain a certification.	√	√
Prerequisite Ap8	Dispute resolution	Dispute resolution	The entity responsible for the certification schemes have established a formal dispute resolution process to address disputes related to certification decisions.	V	V
Prerequisite Ap9	Quality control	Audit frequency	The entity responsible for the certification schemes requires that certified forest operations be subject to annual audits to assess continued compliance with certification standards and, where relevant, the successful closure of corrective action requests.	√	V
Prerequisite Ap10	Quality control	Certificate duration	The entity responsible for the certification scheme imposes a five- year time limit on certification contracts. After five years, schemes require a full assessment for contract renewal.	√	V
Credit Ac2	International consistency	International codes of practice	The entity responsible for the certification scheme is compliant with ISO/IEC Guide 65 and ISO 17021 or their equivalent.	V	V

Prerequisite/ Credit Number	General Concept Certification	Policy Criteria	Requirement(s)	Applies to all raw materials (renewable and non-renewable) and associated products.	Applies to all raw materials (renewable and non-renewable) and associated products and mining restoration
Credit Ac3	Quality control	Peer review	Certification schemes require peer review of certification audit reports by at least two qualified, independent peer reviewers.	V	V
Credit Ac4	Quality control	Field inspection	The entity responsible for the certification scheme requires that the assessment of compliance with standards for orest raw material extraction and associated land management and chain of custody include field-based audits of relevant forest land management operations and forest product sales and processing facilities.	V	V

Implementation

The development of a generic standard for certification of all materials need not be a drawnout process. In view of the work that has already been put into drafting the benchmarking system, rapid progress should be possible. For example, rapid development and implementation of requirements governing sourcing of *non-wood renewable resources* should be possible given the many years of experience with forest certification and the existence of a global forest and organic certification system infrastructure; implementation within a one-year time horizon should be a realistic possibility.

For non-renewable resources, standards development (as noted above) can also be accomplished relatively quickly. In this case implementation may take longer, but need not take decades. Just as USGBC and LEED have played (and continue to play) an important role in encouraging development of certified wood products by establishing credits for certified wood use, establishment of credits for a full range of certified raw materials and products would likewise provide an incentive for positive change.

The Bottom Line

There is no question that there are significant environmental and social problems linked to extraction and processing of every basic material used in building construction. Because of a lack of oversight as to where materials other than wood originate or how they are produced, there is little doubt that some of the materials finding their way each day into "green" buildings are anything but green.

Development of materials certification programs that focus on the full range of environmental and social concerns is long overdue. The USGBC, through work thus far on the Forest Certification Benchmark, has made a great start in such development, positioning itself for a strong leadership role.

Our assessment reveals that virtually all of the prerequisites and credits in the USGBC's Forest Certification Benchmark document are applicable to raw materials in general, making it an ideal starting point for more broadly addressing concerns related to raw material sourcing, extraction, and use and related environmental, social, and economic impacts. It also offers a starting point for addressing additional concerns further from the raw materials source, including manufacturing. We hope that the leadership of USGBC and the LEED program recognize this substantial opportunity and act accordingly.

This report was prepared by **DOVETAIL PARTNERS, INC.**

Dovetail Partners is a 501(c)(3) nonprofit organization that provides authoritative information about the impacts and trade-offs of environmental decisions, including consumption choices, land use, and policy alternatives.

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