



USGBC Forest Certification Benchmark DRAFT for 3rd Public Comment

Created by the Materials and Resources Technical Advisory Group to indicate substantive requirements of forest certification systems in order to earn recognition in the LEED Green Building Rating System

Technical support provided by the Yale Program on Forest Policy and Governance

Approved by the LEED Steering Committee



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Introduction – Forest Certification Benchmark

The following USGBC Forest Certification Benchmark (“the Benchmark”) is a collection of criteria against which regional, national, and global forest certification schemes will be evaluated to determine which gain recognition in the LEED green building certification system. The intention of this document is to allow USGBC to independently establish and transparently indicate its expectations of forest certification schemes if they are to gain recognition in LEED. USGBC does not intend for this document to establish standards for forest management nor forest product transport.

The Benchmark is divided into four sections: “Governance,” to set requirements for certification scheme membership, decision-making, and transparency; “Forestry Standards Substance,” to set requirements for the forestry practices certification schemes require of their certified forests; “Chain-of-Custody & Labeling,” to set requirements for the chain of control over and labeling of an item from production to final sale; and “Accreditation & Certification Processes,” to set requirements for how certification schemes accredit their certifiers and audit their certifications.

In August, 2008, the Benchmark was presented for public comment along with revisions to the related LEED credits. At that time, some benchmarks did not contain requirements, instead indicating that the issue at hand was not a core issue as long as other benchmarks were met. In September, 2009, a revised Benchmark was presented for a second public comment period. That version’s new features included explicit requirements for instances “no specific benchmark” was previously indicated or (if there still would be no requirement) directing readers to those prerequisites or credits that address the issue. Second, the 2009 version presented prerequisite- and credit-level requirements. At the time, a forest certification scheme was required to meet all Prerequisites and meet the requirements of at least 40% of the Credits.

For this third public comment period, the Benchmark has been slightly modified. First, two Governance prerequisites and one Governance credit have been revised to allow greater flexibility in balance and decision making. Second, a new prerequisite requirement for the responsible use of genetically-modified organisms has been included. Last, language requiring “the recognition and respect of the traditional and legal rights of indigenous peoples” has been moved from a credit (Sc14: Aboriginal Land and Tenure Rights) to part of an existing prerequisite (Sp18: Community Benefit).

The accompanying credit revisions propose different thresholds certification schemes must meet to earn varying levels of recognition in LEED. To gain entry level recognition (\$0.5 credit to each \$1 spent on wood certified by the scheme), a scheme must meet the Benchmark’s prerequisites. Higher level recognition requires prerequisites and 30% of the credits, followed by prerequisites and 60% of the credits.

The proceeding pages include the following: prerequisite/credit number, prerequisite/credit name, revised requirements in black or red text, and unchanged requirements in grey text. Please see the associated end notes for elaboration on some requirements and/or an explanation for a particular revision.

USGBC Forest Certification Benchmark - Governance

Prerequisite	Credit		
For all endnotes in a particular benchmark requirement, please see the accompanying End Notes to Forest Certification Benchmarks. The endnotes contain background information on a requirement's revision, elaboration, or exclusion.			
Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)
Gp1	Balance	Governing structure	The entity responsible for the certification scheme has governance structures that 1) are designed to provide balanced representation of social, environmental and economic interests; and 2) allocate a maximum of 1/3 of all votes to governmental or for-profit forest owners, producers, and other entities with a commercial interest in the sale of forest products.
Gp2	Balance	Decision-making I	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 1/3 of the representatives of environmental, social and economic interests respectively. ¹
Gp3	Balance	Funding	The entity responsible for the certification scheme makes sources of funding publicly available. ²
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. ¹
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. ¹
Gp6	Continual improvement	Continual 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.
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.

USGBC Forest Certification Benchmark - Governance

Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)
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 their equivalent.
Gc3	Openness	Establishment of governing body	The governing body of the entity responsible for the certification scheme is elected by the scheme's membership. ³
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. ¹
Gc5	Balance	Decision-making II	The entity responsible for the certification scheme requires that balloted decisions be based on a majority vote from approval from at least 1/3 of the representatives of environmental, social, and economic interests respectively. ¹
Gc6	Public input	Level of standard-setting	The entity responsible for the certification scheme has developed sub-national indicators based on balanced local stakeholder input (see other governance benchmarks for a definition of "balanced" input).
Gc7	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.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite	Credit			
For all endnotes in a particular benchmark requirement, please see the accompanying End Notes to Forest Certification Benchmarks. The endnotes contain background information on a requirement's revision, elaboration, or exclusion.				
Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Forest extent				
Sp1			Forest extent	Certification schemes prohibit the conversion of forest to another land use (see corresponding end note), except in those cases where such conversion: 1) occurs on a very limited portion of the forest management unit; 2) does not occur in forests of special conservation value; and/or 3) conversion enables clear long-term conservation benefits. ⁴
Sc1			Carbon storage	Certification scheme standards explicitly encourage forest managers to calculate the net carbon uptake of forest management and consider this information when developing forest strategies (including such activities as participation in larger-scale projects, monitoring forest carbon, and/or carbon certification). ⁵

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Biodiversity				
Landscape				
Sp2			Forests of special conservation value	<p>Certification schemes require the identification and maintenance and/or enhancement of the special attributes of forests of special conservation value. Such forests 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, identification of these forests involves consultation with stakeholders and experts. Information on conservation measures is one of the pieces included in a publicly available audit report.</p>

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
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 and uniqueness of the affected resources. ⁶
Ecosystem diversity				
Sp4			Ecosystem structure, function and forest successional stages	Certification schemes require the maintenance and/or restoration of the structure, function, and composition of forest ecosystems within the range of natural variability. Appropriate to the scale and intensity of forest management, this includes ensuring that management within the forest unit aids in the maintenance and/or restoration of representative samples of forest successional stages, and the range of naturally occurring species, across the broader forest landscape. It also includes the provision of key habitat features for the conservation of biodiversity, and the protection of soil and water resources. <i>(Note: This is a core benchmark. All of the other environmental prerequisites/credits, Sp1-Sp16 and Sc1-Sc10, serve to elaborate upon the concepts contained in this benchmark).</i> ⁷
Sp5			Old growth I	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.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Sp6			Plantations	<p>Certification schemes prohibit the certification of plantations that were converted from natural forest after 2009 unless the current owner is not responsible for their conversion. Exceptions are allowed where: 1) conversion occurs on a very limited portion of the forest management unit; 2) conversion does not occur in forests of special conservation value; 3) conversion enables clear long-term conservation benefits; and/or 4) there are demonstrated efforts, guided by long-term planning, to restore the plantation area to natural forest conditions. For this purpose, the definition of plantation is consistent with the Food and Agriculture Organization's definition for the 2005 Forest Resources Assessment. Certification schemes require that management of plantations that meet the above pre-requisites employs a precautionary approach that adheres to all other certification requirements to the degree necessary to 1) support long-term plantation health and productivity and 2) support the movement of native species across the broader landscape.⁸</p>
Sc2			Old growth II	<p>Certification schemes (worldwide) 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. These requirements are accompanied by regionally appropriate definitions of old growth.</p>
Sc3			Tree/snag/woody debris retention	<p>Certification schemes require retention of stand-level wildlife habitat elements (e.g. snags, nest trees, etc.).⁹</p>
			Clearcutting	<p>(There will be no benchmark on this topic in the final version, as this issue is contained within Sp4: Ecosystem structure and function and Sp10: Management of natural disturbance).¹⁰</p>

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Species, genetic diversity				
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.
Sp8			Species at risk	Certification schemes require that forest managers assess their properties for the presence of threatened and endangered species and, where present, develop and implement a plan to protect their habitat. ¹¹
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.
Sp10			Genetically-modified organisms (GMOs) I	If certification schemes allow for the use of genetically-modified organisms, they require following or using risk assessment per Annex III of the Cartagena Protocol of the Convention on Biodiversity.
Sc4			Genetically-modified organisms (GMOs) II	Certification schemes prohibit the use of genetically modified organisms.
Sc5			Biotechnology	Certification schemes require that the use of biotechnology is consistent with a "precautionary approach" and is based on sound science and appropriate field trials.
Forest health				
Forest restoration				
			Forest restoration	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark Sp4: Ecosystem structure and function.) ¹²

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Natural disturbance (ex. Pests, diseases, fire)				
Sp11			Management of Natural Disturbance	Certification schemes require the monitoring and maintenance of the health and vitality of forest ecosystems, with consideration for the naturally-occurring role of fire, pests and other natural disturbances. ¹³
Sp12			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. ¹⁴
Productive functions				
Sustainable production				
Sp13			Environmental services I	Certification schemes require the recognition, maintenance and, where appropriate, enhancement of the value of environmental services provided by forests such as biogeochemical cycling, the protection of water supplies, and the conservation of wildlife and fisheries.
Sp14			Reforestation I	Certification schemes require that forest managers reforest in a timely manner. ¹⁵
Sp15			Soil productivity	Certification schemes require that forest management maintain or enhance soil productivity. ¹⁶
Sc6			Timber production	Certification schemes require that timber harvest levels are sustainable over periods of ten years or less.
Sc7			Non-timber forest products	Certification schemes require that the rate of harvest of non-timber forest products does not exceed that which can be sustained over the long term. ¹⁷

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Sc8			Environmental services II	Certification schemes encourage forest managers to consider the full range of environmental services forests provide and explore alternative markets for environmental services. ¹⁸
Sc9			Reforestation II	Certification schemes require that reforestation meets targets that have been established, through credible sources, for stocking levels and time frames based on forest type.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Protective functions				
Soil and water resources				
Sp16			Riparian protection	Certification schemes require that forest management 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. ¹⁹
Sp17			Physical infrastructure (roads, skid trails, etc.)	Certification schemes require the minimizing of damage to forest 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.
Sc10			Soil protection	Certification schemes require that forest management minimize and mitigate disturbance and damage to soil resources.
			Residual tree protection	(There will be no benchmark on this topic in the final version, as this issue is contained within Sp4: Ecosystem structure and function and Sc3: Tree/snag/woody debris protection.) ²⁰

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Socio-economic				
Local communities				
Sp18			Community benefit	<p>Certification schemes require the recognition and respect of the traditional and legal rights of local communities. They also require, appropriate to the scale and intensity of forest management, the promotion of the long-term health and well-being of communities within or adjacent to the forest management area. This includes the recognition and respect of the traditional and legal rights of indigenous peoples to their lands and resources.²¹ <i>{Note: This is a core benchmark that outlines a broad goal of sustainable forest management. Sp18-Sp28 and Sc11-Sc20 are all of relevance in meeting this goal.}</i></p>
Labor				
Sp19			Right to organize	Certification schemes require observance of fair labor practices across all operations.
Sp20			Wages	Certification schemes require compliance with all applicable wage laws.
Sp21			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. ²²
Sp22			Health and Safety	Certification schemes require compliance with all applicable laws and regulations covering health and safety of employees and their families.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Public				
Sp23			Public Consultation I	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.
Sc11			Public Consultation II	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. Public consultation must explicitly include external stakeholders and experts.
Sc12			Recreation, public access	Certification schemes require that forest management operations take into account impacts on recreational activities and public access (as supported by law). ²³
Sc13			Aesthetics	Certification schemes require that forest management operations take into account the aesthetic values of forests. ²⁴
			Public lands	(There will be no benchmark on this topic in the final version, as this issue is contained within Sp22 and Sc11: Public Consultation I and II) ²⁵
Forest operation				
Sp24			Economic viability	Certification schemes require that forest operations strive towards economic viability. ²⁶
			Utilization	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark Sp4: Ecosystem structure and function.) ²⁷

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Indigenous rights				
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. ²⁷ (Equivalent language has been added to Sp18: Community Benefit.)
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.
Sc16			Traditional knowledge	Certification schemes require that indigenous peoples are compensated for use of their traditional knowledge regarding forest species and/or forest management systems. Free and informed consent regarding the means and amount of compensation must be obtained before the application of such knowledge.
Legal, institutional, policy frameworks				
Legal compliance				
Sp25			Forest law	Certification schemes require compliance with all forest-related international agreements (within signatory countries), and forest-related national and local laws and
Sp26			Land tenure	Certification schemes require that property rights and land tenure are clearly defined, and that forest operators comply with all legislation relating to property rights. As consistent with national norms for forest use, schemes also require recognition and respect of the legal and customary rights of local communities to access and/or use forest resources.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Planning				
Sp27			Management plan	Certification schemes require, appropriate to the scale and intensity of forest management, that forest 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 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. ²⁹
Monitoring				
Sp28			Monitoring	Certification schemes require, appropriate to the scale and intensity of forest management, monitoring that assesses the condition of the forest, yield of forest products, and the social and environmental impacts of forest practices. ³⁰
			Impact assessment	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark Sp27: Monitoring.)
			Continual improvement	(There will be no benchmark on this topic in the final version, as this issue is contained within Sp26: Management Plan and Sp27: Monitoring.)

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Infrastructure and Process				
Sp29			Infrastructure and process	Certification schemes require that, appropriate to the scale and intensity of forest 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				
Sc17			Procurement	Certification schemes require, appropriate to the scale and intensity of forest management, that forest products procured from outside sources are sourced from operations that observe Best Management Practices and utilize trained loggers. Education and outreach is conducted among non-certified operators regarding reforestation and protection of endangered species.

USGBC Forest Certification Benchmark - Standards Substance

Prerequisite/ Credit Number	7 Sustainable Forest Mgmt. Themes	Criteria	Key Issues	Requirement(s)
Training and research				
Sc18			Training	Certification schemes require that workers be adequately trained to meet certification standards. Appropriate to the scale and intensity of forest management, residents within or adjacent to the forest management area are given opportunities for employment, training and other services.
Sc19			Education and Outreach	Certification schemes require, appropriate to the scale and intensity of forest management, the promotion at support of state, provincial and other levels, mechanisms for public outreach, education, and involvement related to forest management.
Sc20			Research	Certification schemes require, appropriate to the scale and intensity of forest management, the provision of in-kind support or funding (individually, or through cooperative efforts or associations) for forest research to improve the health, productivity and management of forest resources.

USGBC Forest Certification Benchmark - Chain of Custody and Labeling

Prerequisite	Credit		
For all endnotes in a particular benchmark requirement, please see the accompanying End Notes to Forest Certification Benchmarks. The endnotes contain background information on a requirement's revision, elaboration, or exclusion.			
Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)
Cp1	Compliance with international normative institutions	Compliance with international normative institutions	Certification schemes require compliance with ISO 14020 and 14021 or equivalent.
Cp2	Third party	Chain of Custody system	Certification schemes require third-party claims.
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 from: 1) illegal or unauthorized sources; 2) non-certified forests of special social and environmental conservation value; ³¹ 3) genetically-modified organisms, and 4) harvesting that converts natural forest to plantations / non-forest.
Cp4	Restrictions on non-certified material	Definition of legality	Certification schemes explicitly ban wood from illegal harvest in protected areas. Compliance with CITES is required.
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 sourced from low-risk countries to be acceptable and require 2nd or 3rd party verification of legality for wood sourced from high-risk countries.
	Transparency	Chain of Custody procedures	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark C1: Compliance with international normative institutions.)
	Transparency	Types of product labels	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark C1: Compliance with international normative institutions.)
	Transparency	Minimum certified material	(There will be no benchmark on this topic in the final version, as this issue is contained within Benchmark C1: Compliance with international normative institutions.)

USGBC Forest Certification Benchmark - Accreditation and Certification Process

Prerequisite	Credit		
For all endnotes in a particular benchmark requirement, please see the accompanying End Notes to Forest Certification Benchmarks. The endnotes contain background information on a requirement's revision, elaboration, or exclusion.			
Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)
Accreditation			
Ap1	Quality control	Accreditation system	Accreditation systems are specifically designed for forest management and chain of custody.
Ap2	Quality control	Surveillance of auditors	The entity responsible for the certification scheme and/or 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 operations. ³²
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.
Ap4	Public input	Public input I	The entity responsible for the certification scheme and/or accreditation bodies recognized by those schemes require that public input be addressed regarding the performance of accredited certifiers {as part of the annual surveillance audit process}.
Ac1	Public input	Public input II	The entity responsible for the certification scheme and/or accreditation bodies recognized by those schemes require that public input be addressed regarding the accreditation of certifying bodies.
Certification			
Ap5	Public input	Notification (of stakeholders by certifier)	The entity responsible for the certification scheme requires that certifiers provide advance notice of certification audits to local stakeholders as appropriate to the scale and intensity of the forest operation.
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.

USGBC Forest Certification Benchmark - Accreditation and Certification Process

Prerequisite/ Credit Number	General Concept	Policy Criteria	Requirement(s)
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, 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.
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.
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.
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.
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.
Ac3	Quality control	Peer review	Certification schemes require peer review of certification audit reports by at least two qualified, independent peer reviewers.
Ac4	Quality control	Field inspection	The entity responsible for the certification scheme requires that the assessment of compliance with standards for forest management and chain of custody include field-based audits of relevant forest management operations and forest product sales and processing facilities.
	Third party	Third party	(There will be no benchmark on this topic in the final version, as this issue is contained within the Chain or Custody benchmarks relating to the relationship between third party auditing and certification claims.)

End Notes to Forest Certification Benchmark

1. The intent of the policy requirements is that the relevant policies be both developed and implemented. If evidence becomes available that the policies have not been implemented then this could be considered as evidence that the scheme does not meet the benchmark.
2. Certification schemes are not required to develop a policy of public disclosure in those regions where such disclosure is required by law.
3. Election of governing board members from outside of the board promotes greater openness and accountability to a broader range of stakeholders than internal board appointments. Exceptions are allowed where necessary to ensure that the board contains the necessary expertise to fulfill its governing responsibilities.
4. USGBC supports forest production that does not lead to loss of natural forest habitat. For the purposes of these benchmarks, "conversion of forest to another land use" is intended to be synonymous with the Food and Agriculture Organization's definition of "deforestation", i.e. "The conversion of forest to another land use, or the long-term reduction of the tree canopy cover to below the minimum 10 percent threshold." Source: FAO. 2004. Global Forest Resources Assessment Update 2005. Terms and Definitions (Final Version). Rome: Food and Agriculture Organization of the United Nations; pages 25, 26.
5. No certification schemes currently include measurable requirements that address the role of forests in carbon storage.
6. Functions of protected areas include: 1) to provide an ecological reference condition; 2) create or maintain under-represented ecological conditions; and 3) protect rare or sensitive species.
7. USGBC supports forest management that maintains the long-term health and integrity of natural forest ecosystems. Given the limits of current knowledge regarding ecological processes, the concept of the "range of natural variability" represents a precautionary approach to maintaining long-term ecosystem health. Past forest conditions and processes provide context and guidance regarding how ecosystems maintain themselves through time. Disturbance (i.e. fire, wind, insects, etc.)-driven spatial and temporal variability is a vital attribute of nearly all ecological systems. The USGBC benchmarks do not prescribe the precise time and spatial scale at which such attributes should be maintained, but rather are designed to support certification schemes that promote consideration of such factors in management regimes. For a summary review of the concept of "range of natural variability" see: Landres, PB; Morgan, P; Swanson FJ. 1999. Overview of the use of natural variability concepts in managing ecological systems. Ecological Applications 9(4) 1179-1188. Additionally, it is recognized that climate change affects the range of natural variability. Forest management should follow the best available science regarding adaptation to changing environmental conditions.
8. As consistent with Sp4: Ecosystem structure and function, USGBC does not support the conversion of natural forests to intensively managed plantations since such disturbance exceeds the range of natural variability and adversely impacts habitat and species diversity. The cutoff date for conversion is based on the anticipated release date of USGBC's Forest Certification Scheme Benchmarks to provide affected parties with advanced, transparent notice regarding USGBC policy. The FAO definition of plantations is: Forest/Other wooded land of introduced species and...(in some cases) native species established through planting or seeding characterized by few species, straight tree lines and/or even-aged stands. (FAO. 2004. Global Forest Resources Assessment Update

2005. Terms and Definitions (Final Version). Rome: Food and Agriculture Organization of the United Nations (FAO), pp. 17, 18).

9. See also Sp4: Ecosystem structure and function. This benchmark is meant to highlight the importance of appropriate retention of wildlife habitat elements. It is subsidiary to Sp4: Ecosystem structure and function requirements that elements of stand structure should be maintained within the range of natural variability.
10. Sp4: Ecosystem structure and function and benchmark Sp10: Management of natural disturbance both call for designing harvest patterns to mimic natural disturbance regimes. This limits clearcut sizes to within the range of natural variability for a given forest type.
11. The content of habitat protection "plans" is deliberately not specified, recognizing that requirements will vary depending on the scale and intensity of forestry impacts. Where impacts are modest, plans need not be lengthy or highly technical.
12. Sp4: Ecosystem structure and function includes the requirement to restore ecosystem structure and function to within the range of natural variability.
13. See also Sp4: Ecosystem structure and function. The objective addressed by this benchmark is to maintain or restore ecosystem structure and function to within the range of natural variability. It is not to mimic extreme events that could threaten the ecological balance.
14. "Minimize": To do only that which is necessary and appropriate to accomplish the task or objective described. "Least-toxic and narrowest-spectrum pesticide": A chemical preparation used to control site-specific pests that minimizes impact to non-target organisms and causes the least impact to the site while meeting management objectives. The management objectives consider the target pest, the degree of control needed, cost, and other issues, such as season and timing of application, rates and methods, terrain, forest conditions, and the presence or absence of water bodies. The following chemicals are prohibited: chlorinated hydrocarbon pesticides, pesticides banned by international agreement. Also prohibited: chemicals deemed to be acutely toxic to terrestrial or aquatic organisms, or highly persistent (including dioxins) according to the World Health Organization, the U.S. Environmental Protection Agency (for forest operations within the U.S.), or the Stockholm Convention on Persistent Organic Pollutants (POP). If temporary exemptions are allowed, there is a formal, transparent process for obtaining them.
15. This benchmark is goal/objective-oriented rather than prescriptive, due to its global-scale application. If certification schemes choose to prescribe stocking levels and time frames, then these should be tailored as appropriate to forest type.
16. See also Sc10: Soil protection. This benchmark is goal/objective-oriented rather than prescriptive.
17. USGBC recognizes that there is a lack of adequate information on sustainable harvest rates for many forest products and/or species, particularly those for which there has historically been limited commercial use. USGBC expects certification schemes to promote due diligence and a precautionary approach in the context of these uncertainties.
18. See also Sc1: Carbon storage. The provision and marketing of "environmental services" from forests is an issue that has gained increasing traction in the U.S., Canada and internationally. The Distinguishing benchmark is a target and is intended to encourage certification schemes to support these efforts.
19. See also Sp4: Ecosystem structure and function.
20. This issue area addresses damage to residual trees and other natural resources as a result of harvesting activities. Residual damage is believed to be adequately addressed under Sp4: Ecosystem structure and function. While some certification schemes may

include specific requirements to protect residual stands (something supported by USGBC), it is believed that this level of detail was not required for inclusion in a global USGBC benchmark.

21. The intent of this requirement is to ensure that forest managers in all countries practice due diligence in recognizing and addressing indigenous rights to land and resources. This benchmark is of relevance in all countries, regardless of the nature and extent of underlying legal frameworks and their implementation. The goal of USGBC is to reward exemplary performance, not merely legal compliance.
22. The intent of this benchmark is to ensure that forest managers in all countries practice due diligence in registering and addressing grievances.
23. Benchmarks relating to public consultation (Sp22 and Sc11) and land tenure (Sp25) provide avenues to address recreational use and public access. Recreational forest users could be considered to be directly affected persons whom, according to Sp22: Consultation, should be given opportunities for input and consultation regarding management activities that affect them. Legal and customary access rights are addressed under Benchmark S41: Land tenure.
24. Sp22: Public Consultation requires that directly affected persons be given opportunities for input and consultation regarding management activities that affect them. This would include opportunities for consultation regarding aesthetic impacts.
25. In the case of public lands the "people and groups directly affected" by forest management who are covered under Sp22: Public consultation include any and all interested members of the "public" that own those lands.
26. Economic viability is recognized as a core component of sustainable forestry. This benchmark provides the opportunity for certifiers to balance economic with social and environmental considerations in assessing the long-term impacts of management and encourages certification decisions that include guidance on an operation's economic viability.
27. Sp4: Ecosystem structure and function serves to reduce the likelihood of wasteful forest practices that result in disturbances beyond the range of natural variability.
28. Forest-related laws include all laws relevant to the USGBC benchmarks, including wildlife laws, water quality laws, labor laws, treaties with indigenous peoples, etc.
29. See also Sp22: Public consultation regarding public summaries of management plans.
30. See also Sp26: Management plan on incorporating the results of monitoring into management planning.
31. See Sp2: Forests of special conservation value for more information.
32. See also Ac2: International codes of practice.