

# SBP

Sustainable Biomass Partnership

## Supply Base Report Drax Biomass Inc: Amite BioEnergy LLC

[www.sustainablebiomasspartnership.org](http://www.sustainablebiomasspartnership.org)



## Completed in accordance with the Supply Base Report Template Version 1.1

*For further information on the SBP Framework and to view the full set of documentation see [www.sustainablebiomasspartnership.org](http://www.sustainablebiomasspartnership.org)*

### *Document history*

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# 1 Overview

**Producer name:** Drax Biomass Inc. (DBI)
 

- Amite BioEnergy LLC (ABE)

**Producer location:** DBI Corp: 5 Concourse Parkway NE Suite 3100 Atlanta, GA 30328
 

- ABE: 1763 Georgia Pacific Rd #2 Gloster, MS 39638

**Geographic position:** DBI: 33.916972, -84.354599
 

- ABE: 31.184917, -91.035611

**Primary contact:** David D. James  
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**Company website:** [www.draxbiomass.com](http://www.draxbiomass.com)

**Date report finalised:** 19/Apr/2016

**Close of last CB audit:** ABE: 08/Aug/2015 @ Biomass Producer

**Name of CB:** SCS Global Services

**Translations from English:** No

**SBP Standard(s) used:** Standard 1-5, version 1, March 2015

**Weblink to Standard(s) used:** <http://www.sustainablebiomasspartnership.org/documents>

**SBP Endorsed Regional Risk Assessment:** N/A

**Weblink to SBE on Company website:** <http://draxbiomass.com/sustainability/certifications/>

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
<b>X</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2 Description of the Supply Base

### 2.1 General description

Drax Biomass Inc's ("DBI" or "Company") fiber procurement catchment includes southern Arkansas, Louisiana, Mississippi and eastern Texas in the United States. DBI owns and operates two pellet plants: Amite BioEnergy LLC ("Amite BioEnergy" or "ABE") in Gloster, MS; and Morehouse BioEnergy LLC ("Morehouse BioEnergy" or "MBE") near Beekman, LA. Both plants draw feedstock within a 70-mile radius, but maintain the ability to procure out to a 90-mile radius in response to market pressures and weather events. All statements based on the 90-mile radius are made for precautionary purposes. ABE specifically procures fiber from Mississippi and Louisiana.

#### **Scale of fiber consumption and resulting harvests vs other forest based industries in DBI's wood procurement catchments**

DBI purchases virtually all its fiber indirectly from private landowners with negligible amounts originating from public ownership via a supplier network. Less than half of the fiber originates from institutionally owned private forests while the overwhelming majority is derived from family owned private forests.

#### **Amite BioEnergy**

Facility is designed to consume 800,000 to 1 million green metric tons of biomass material per annum. The sourced material is comprised of mainly southern yellow pine with a potential *de minimis* quantity of mixed southern hardwoods. The material arrives in the form of low grade roundwood, thinnings, tops, logging and mill residues. According to the USDA Forest Service Timber Products Output Reports, consumption by other forest industry participants within 150 miles of ABE's fiber catchment in 2009 was estimated to be in excess of 20 million metric tonnes per annum which puts into perspective the ability of the catchment to supply the forest products industry. Pulp and chip mills in the region have an average capacity of around 1 million tons per facility per year, with some consuming well over 2 million tons per year. Sawmills are slightly smaller, consuming on average around 300,000 tons per year.

#### **Land Use and Ownership patterns**

Forestry is the dominant land use in the ABE fiber catchment. The majority of the forests in these areas have been harvested several times during the 19<sup>th</sup> and 20<sup>th</sup> Centuries. Over 80% of the forests are privately owned, with most held by "non institutional private forest owners". As the average size of these holdings is less than 100 acres, some owners may have income from sources other than their forest holdings. There is also a significant amount of land owned and managed by large corporations (institutional investors), which typically practice more intensive silviculture and land management driven by the need to produce shareholder returns than the smaller family owned forest landowners who typically manage to achieve more diverse objectives.

While forest coverage has stayed steady in these areas during the past 40-50 years, the forests have become increasingly productive in that time. Forest Inventory Analyses data shows that growth per acre per year has doubled in the US South since the 1950's, and it continues to increase as healthy markets provide

incentives for owners to invest in forest management. Put simply, landowners' access to markets helps to ensure that their forests remain as working forests.

Recent changes in the US pulp and paper industry have resulted in the closure of several pulp mills in or adjacent to the catchment that collectively previously consumed over 3 million tonnes of feedstock each year. The emergence of a wood pellet market has benefited forest owners and contractors in the area by offsetting a portion of the lost demand from the closed pulp mills.

The overall market downturn, subsequent housing market crash of 2008 and the slow recovery in residential construction has resulted in reduced levels of demand for sawtimber. This produced an increase in stocks of larger-diameter trees, with a corresponding reduction in felling and replanting. These market dynamics have long-term consequences for the structure of the forest.

Looking to the future, further increases in pine forest productivity can be achieved through simple measures such as planting with improved seedlings and implementing diligent forest establishment practices. We will seek to engage with and support this process through the sharing of information. In areas with strong markets for forest products, we should expect forests to stay as working forests, whereas other areas may cycle out of forestry into row crops or husbandry, and other agricultural areas may cycle back into forestry. Urban expansion remains the biggest threat to the forest area. Private ownership is expected to remain the main form of forest ownership, but there may be fragmentation as land is split into smaller parcels as it is passed down through generations, thereby creating challenges to implement good forest management practices.

### ***Forestry and Land Management Practices***

There is a mature and well-developed forest sector in this geography. Described as a "wood basket to the world", the US South has grown, harvested and sold many hundreds of millions of cubic meters per year for many decades, while seeing both its forest inventories and productivity levels increase. In the US South as a whole, and in ABE's catchment, annual growth exceeds annual drain by a significant margin.

The main reasons for this include a productive land base that benefits from long growing seasons, sufficient precipitation, and healthy soils, as well as the longstanding engagement of experts and professionals from across industry, academia and public agencies in helping to advance sound forest management practices. Species selection is another important factor, as the majority of landowners grow trees that are indigenous to the area, which creates environmental and economic benefits, such as maintenance of habitats for local flora and fauna, as well as establishing a resilient native growing stock with improved pest and disease resistance. Federal and state governments also provide effective oversight to ensure that forest activities comply with relevant laws and regulations and minimise environmental harm. Moreover, each state employs well-established "Best Management Practices", with programs to promote logger training and audits that demonstrate high compliance rates.

Though the region also possesses a vigorous and productive hardwood sector, ABE primarily uses Southern Yellow Pine (SYP), an abundant and highly productive species. Production and sale of sawlogs remains the main economic driver for landowners, with SYP rotation lengths typically ranging from 20-40 years. The shorter rotations are for the most productive trees on the best sites, while the longer rotations typically apply to trees grown on lower quality sites.

Thinning is an important forest management strategy for growing sawlog-quality SYP. Stands are typically thinned at 12 years old and again at 18 years old to promote faster growth of the remaining trees. Thinning also allows more light to reach the forest floor, which increases the vitality of the forest and also offers recreational benefits. Forest thinnings make up a significant proportion of the feedstock for ABE.

Rotation harvest of SYP is typically conducted through clear cutting. SYP is not tolerant of shade, so the next rotation of young trees requires abundant access to light to grow well. DBI accepts material from rotation harvests, although this is typically limited to residuals and roundwood that are not sold into higher paying markets. The vast majority of material from rotation harvests are sold into sawlog markets.

The next rotation may be re-established through natural regeneration, or the planting of seedlings, or a combination of both. Reforestation often involves some ground preparation to control competing vegetation.

### **Presence of CITES or IUCN species**

There are no Convention on International Trade in Endangered Species of Wild Flora and Fauna (“CITES”) listed species in the catchment that are threatened or otherwise impacted by forest management activities. There is one International Union for Conservation of Nature (“IUCN”) Red List of Threatened Species that is worthy of note – Longleaf pine (*pinus palustris*). This species is far less common than it once was, and efforts are underway to promote longleaf pine coverage in the region. The intent of listing species to the Red List is not to promote prohibition of their use but rather to heighten priority setting for conservation of the species (IUCN 2014)<sup>1</sup>.

Critical to the recovery of the species is continued access to markets for longleaf pine. If landowners do not expect to be able to sell this wood, then they will not plant the tree in the first place. This position is captured in a statement from a USDA researcher and supported by the conservation group the Longleaf Alliance:

*“Strong markets for forest products provide incentives for private landowners to keep their lands in forest cover (Wear 2013). This is particularly important across the longleaf range where recent forecasts of human population and income growth point toward increasing pressure in some locations to convert forest land to other uses (Wear 2013)<sup>2</sup>. Strong markets also enable landowners to invest in the management practices required to establish longleaf pine forests and implement practices such as prescribed fire and thinning which are crucial restoration activities<sup>3</sup>.”*

### **Forestland Descriptions**

ABE’s catchment is located in a unique geographic area with different land cover and terrain characteristics.

ABE is located in a heavily forested region with rolling terrain in which upland forest makes up 38% of all upland area. SYP, generally the most productive forest type in the region, makes up approximately 16% of the land cover in the catchment and it represents 32% of the forest species in the area.

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<sup>1</sup> IUCN Standards and Petitions Subcommittee. 2014. Guidelines for Using the IUCN Red List Categories and Criteria. Version 11. Prepared by the Standards and Petitions Subcommittee. Downloadable from <http://www.iucnredlist.org/documents/RedListGuidelines.pdf>.

<sup>2</sup> Wear, D. N. 2013. “Forecasts of Land Uses.” Chapter 4 in Southern Forest Futures Project Technical Report. <http://www.srs.fs.usda.gov/futures/reports/draft/Frame.htm>.

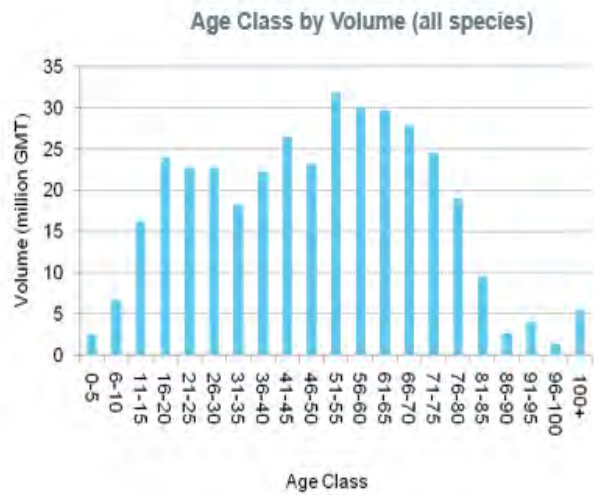
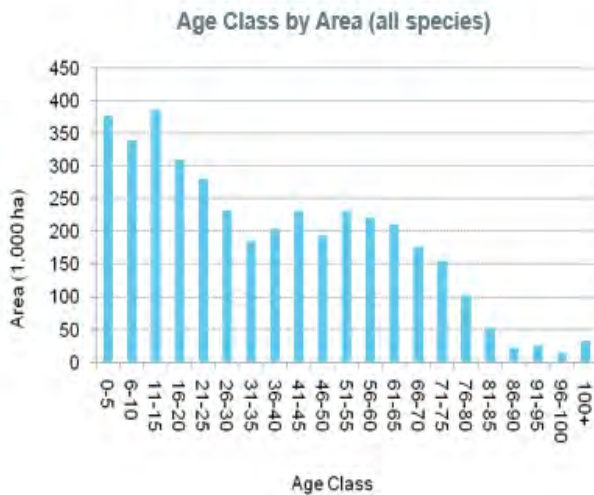
<sup>3</sup> Longleaf Alliance and NCASI. 2014 “Longleaf Pine: Sustainable Forest Management and the Restoration of a Species” brochure.



State forestry websites feature detailed descriptions of forests and include noteworthy facts about each state’s forests. Forest Inventory Analyses data is also publically available, and provide many important parameters, including changes over time, in the states that supply ABE. Summaries of forest coverage near Amite (Gloster) are shown in the tables below.

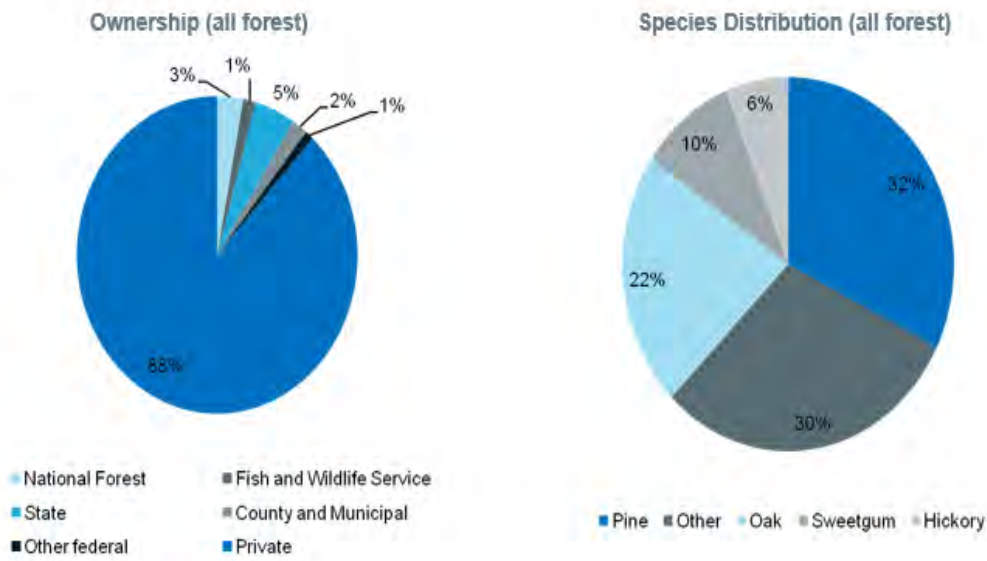
## Gloster, 90 mile radius - Age Class (all species)

- According to the USDA FIA database the total forest area within the catchment is 3.97 million ha which represents 65% of the total land area.
- Total standing volume is estimated at 369 million GMT for all species.



## Gloster, 90 mile radius - Ownership and species distribution

- Private ownership represents 88% of the total forest by area.
- The species mix is more evenly distributed than in other parts of the south with hardwoods much more prominent within this catchment area. Pine species represent 32% of the standing volume.



### SBP Feedstock Product Groups

All Primary and Secondary feedstock used by ABE will be SBP Compliant. If Tertiary Feedstock is used, it too will be SBP Compliant<sup>4</sup>.

## 2.2 Actions taken to promote certification amongst feedstock supplier

DBI implemented Sustainable Forest Management programs, many of which require participant companies to promote certified forest management amongst feedstock suppliers. This includes extensive reporting and contractually required training, as well as other components that are necessary for the certifications. DBI’s procurement staff are trained to assist landowners to achieve these certifications.

DBI will continue to monitor as a key performance indicator (KPI) the amount of certified fiber that it purchases, and will pursue opportunities to increase the area of certified forests within its catchments.

<sup>4</sup> SBP Compliant Primary, Secondary and Tertiary feedstocks are defined in the “SBP Glossary of Terms and Definition” and described further in “SBP Standard 1, section 6, indicator 1.1.3.”

## 2.3 Final harvest sampling programme

The average rotation length for SYP in ABE’s catchment is approximately <35 years. This is below the 40 years rotation length stipulated for the final harvest sampling as required by SBP Standard 5 and the proposed Dutch regulations.

## 2.4 Flow diagram of feedstock inputs showing feedstock type



## 2.5 Quantification of the Supply Base

### Amite BioEnergy Supply Base

- a. Total Supply Base area (hectares): 3.9 million ha cumulative area of all forest types within Supply Base
- b. Tenure by type (ha):
 

Privately owned	c. 88% (c. 75% private, c. 13% large corporates, investment-institutional)
Public	c. 12%
Community concession	<i>de minimis</i>
- c. Forest by type (ha): 4 million ha Temperate
- d. Forest by management type (ha):
  - Plantation 0.6 million ha (c. half the softwood area)
  - Managed Natural c. 3.4 million ha (remainder of the pine, mixed forests, hardwood areas)
  - Natural Less than 200,000 ha
- e. Certified forest by scheme (ha): *Not known in detail for catchment. \*SFI® and American Tree Farm™ are the predominant schemes, with minor areas of FSC® certified forest.* DBI expects the feedstock supply to generally mimic the certified percentage offerings state wide. DBI estimates the ability to procure a conservative 20% of feedstock from certified sources.

<i>American Tree Farm System™</i>		<i>Percentage(%) of forest in state</i>
<i>Mississippi</i>	<i>1,900,000 ac (768,902 ha)</i>	<i>9.7</i>
<i>Louisiana</i>	<i>1,500,000 ac (607,028 ha)</i>	<i>10.3</i>
<i>Sustainable Forestry Initiative®</i>		<i>%</i>
<i>Mississippi</i>	<i>1,282,810 ac (519,134 ha)</i>	<i>6.6</i>
<i>Louisiana</i>	<i>2,942,400 ac (1,190,747 ha)</i>	<i>20.2</i>
<i>Forest Stewardship Council®</i>		<i>%</i>
<i>Mississippi</i>	<i>280,349 ac (113,453 ha)</i>	<i>1.4</i>
<i>Louisiana</i>	<i>606,885 ac (245,597 ha)</i>	<i>4.2</i>
<b><i>ATFS™ and SFI® Subtotal*</i></b>	<b><i>7,625,210 (3,085,813 ha)</i></b>	<b><i>22.4</i></b>
<b><i>Total including FSC®</i></b>	<b><i>8,512,444 ac (3,444,863 ha)</i></b>	<b><i>25.0</i></b>

### Feedstock<sup>5</sup>

Assuming steady state operations for the production of 400K to 500K pellet metric tonnes:

- f. Total volume of Feedstock: 800K to 1.0M green metric tonnes
- g. Volume of primary feedstock: 800K to 1.0M green metric tonnes
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes.

*Insufficient information to date to give precise results but rather provide estimated ranges. Our expectation for primary feedstocks in “steady state” production would be in ranges shown below:*

- c. 20% to 40% certified to an SBP-approved Forest Management Scheme
  - i. SFI®: c. >99%
  - ii. ATFS™: c. <1%
- c. 80% to 60% not certified to an SBP-approved Forest Management Scheme

- i. List all species in primary feedstock, including scientific name  
 Predominantly Southern Yellow Pine – Majority Loblolly Pine (*Pinus taeda*), smaller quantities of other pines – Slash pine (*Pinus elliotii*), Shortleaf pine (*Pinus echinata*), Spruce pine (*Pinus glabra*), Virginia pine (*Pinus virginiana*) and de minimis volumes of Longleaf Pine (*Pinus palustris*)-see comments in Presence of CITES or IUCN species section. Minute component of mixed southern hardwoods, various varieties of oak, maple, hickory, ash and others-Full list of 56 hardwood species available.

Many components of these wide range of species may appear when in-woods chipping occurs. At present, in-woods chips comprise less than 1% of ABE’s feedstock.

- j. Volume of primary feedstock from primary forest – Nil
- k. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes
  - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme

<sup>5</sup> Commercial sensitivity: Specific volumes omitted. Divulging current or forecasted feedstock volumes may be used by third parties to gain a competitive advantage in the catchment. These volumes are subject to change.

- Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme
- l. Volume of secondary feedstock: *0% to 20% residues*
- m. Volume of tertiary feedstock: *None anticipated*

### 3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
X	<input type="checkbox"/>

A Supply Base Evaluation is required because a significant proportion of the forest surrounding the pellet mills is not certified. This evaluation will determine the legality and sustainability of fiber delivered to ABE.

## 4 Supply Base Evaluation

### 4.1 Scope

The scope of the evaluation covered the entire supply area for the pellet mills, which considered all existing and potential sources of primary and secondary feedstocks (residuals), as well as the feedstocks' point of origination. The evaluation covered both pellet mills, and is contiguous with the areas covered by DBI's due diligence processes and risk assessment for PEFC™ Controlled Sources and FSC® Controlled Wood. The intent of the supply base evaluation was to discern the risk level when compared to the indicators of SBP Standard 1. There were no omissions or sub-scopes within the evaluation.

### 4.2 Justification

The majority of supply is expected to come from private lands, and although there are some larger holdings which are certified, there are many smaller forests that are not. It was therefore deemed prudent to evaluate the entire area without exclusions. The supply area for both pellet mills is included in one assessment, as the applicable legal requirements across the supply base are sufficiently similar, and the forest practices are also sufficiently similar.

This review and analysis was completed by comparing the existence, effectiveness and applicability of statutes/regulations, established forestry best management practices and recognized research from reputable sources to determine compliance and risk rating in relation to Criteria 1 & 2 of the SBP Standard 1.

### 4.3 Results of Risk Assessment

The Risk Assessment concluded that all aspects are "Low Risk" in the catchment area for the feedstock being used. This is predominantly due to sufficient and effective legal requirements in this geography, supported by a mature forest industry with well-established practices, including Best Management Practices promoted by states and supported by industry. This sound framework is supplemented by DBI's procurement procedures and third party audits for FSC® Chain of Custody (CoC), PEFC™ CoC, and SFI® CoC and Certified Fiber Sourcing. In addition, the growth management and harvesting of SYP is less complex than for other forest types, and typically has fewer environmental sensitivities.

No special mitigation measures were identified beyond diligent procurement practices.

### 4.4 Results of Supplier Verification Programme

Risk assessment results indicate "low risk" therefore no supplier verification program is required at this time.

### 4.5 Conclusion

There is "low risk" to all indicators of the SBP Standard 1 based on the evidence provided of sound forestry practices, existing effective legislation and diligent procurement processes that guide industry and

landowners on the sustainable management of forests. Forest inventories are steadily increasing and carbon stocks remain stable in ABE's catchment. Local communities benefit from the economic impact resulting from ABE's operations.

In conclusion, the raw material supply and resulting production of pellets comply with SBP requirements.



## 5 Supply Base Evaluation Process

DBI utilized both internal and external resources to complete the Supply Base Evaluation (SBE). The SBE was produced by DBI employees with experience in forest certification and sustainability. An external consultant helped collect supporting evidence and collate and analyse stakeholder responses. Other DBI employees, particularly those on the procurement team and those associated with company systems, also contributed to the SBE. Evidence collected and work performed to achieve and maintain pre-existing certification programs was used in the SBE. Remaining shortfalls were completed by using reputable sources of information provided by public agencies, conservation organizations and forestry organizations from within the region. Contractual requirements with feedstock suppliers provided the baseline in which initial compliance with SBP indicators were achieved.

The evaluated biomass producers were undergoing commissioning at the time of this evaluation, so there was limited trading and operational experience available to inform some aspects. The forest elements of the evaluation were not materially affected by this, but lack of information regarding steady production rates was an inevitable factor in the SBE.

## 6 Stakeholder Consultation

DBI administered the stakeholder consultation in two phases, and the full effort concluded on December 11, 2015. Notification to all interested parties was posted on DBI's website ([www.draxbiomass.com](http://www.draxbiomass.com)) signalling the launch of the initial stakeholder consultation period and upcoming SBP external audit.

To properly identify interested stakeholders, DBI staff solicited a wide range of potential stakeholders for the initial consultation. Invitations were sent out to c. 200 stakeholder groups (Appendix A) totalling 233 contacts representing a cross-section of interests and expertise, including local, state and federal agencies, local forest industry participants, research institutions, forestry/landowner associations, NGOs, indigenous peoples and others.

Stakeholders were administered questions via online survey relating to the main SBP criteria, and were asked to identify any pertinent issues. Verifiers were presented for each indicator and consultees were asked to rate the evidence used to conclude each as low risk. Consultees were also solicited to provide additional verifiers and to comment on the quality of the verifiers presented for each indicator. DBI received 48 direct responses and the vast majority of respondents completed ratings inputs.

The certifying body held a follow-up consultation immediately after conclusion of DBI's consultations. Results of those consultations appear in the certifying body's public audit reports for each biomass producer.

### 6.1 Response to stakeholder comments

All comments received through the consultation were impartially reviewed by a third party consultant. Comments containing verifiers of a challenging or supportive nature, including quotations capturing personal experiences from experts in their respective fields were collected.

The comments demonstrated that the consultees had not identified any risks that required further controls or mitigation. Many consultees re-affirmed the effective nature of existing controls in the region and provided supplements to existing verifiers. As such, the responses to DBI supported the Low Risk designation for all indicators. A summary of stakeholder responses is included in Appendix B.

## 7 Overview of Initial Assessment of Risk

The initial risk assessment for DBI determined that all indicators are Low Risk for all areas from which ABE procures biomass. The risk ratings were determined by studying a large volume of evidence previously collected to conduct DBI’s company-level Controlled Wood Risk Assessment and Due Diligence Processes, and to determine compliance with the European Union Timber Regulation and the UK Department of Energy and Climate Change’s Timber Standard for Heat and Electricity. The Low Risk ratings were supported by DBI’s conclusion that the United States and the relevant states have well-established systems of laws and regulations that satisfy all applicable SBP indicators.

There are no sub-scopes.

Table 1. Overview of results from the risk assessment of all Indicators

Indicator	Initial Risk Rating			Indicator	Initial Risk Rating		
	Specified	Low	Unspecified		Specified	Low	Unspecified
1.1.1		X		2.2.9		X	
1.1.2		X		2.3.1		X	
1.1.3		X		2.3.2		X	
1.2.1		X		2.3.3		X	
1.3.1		X		2.4.1		X	
1.4.1		X		2.4.2		X	
1.5.1		X		2.4.3		X	
1.6.1		X		2.5.1		X	
2.1.1		X		2.5.2		X	
2.1.2		X		2.6.1		X	
2.1.3		X		2.7.1		X	
2.2.1		X		2.7.2		X	
2.2.2		X		2.7.3		X	
2.2.3		X		2.7.4		X	
2.2.4		X		2.7.5		X	
2.2.5		X		2.8.1		X	
2.2.6		X		2.9.1		X	
2.2.7		X		2.9.2		X	
2.2.8		X		2.10.1		X	

## 8 Supplier Verification Programme

### 8.1 Description of the Supplier Verification Programme

No Supplier Verification Program required due to Low Risk rating of the risk assessment.

### 8.2 Site visits

N/A

### 8.3 Conclusions from the Supplier Verification Programme

N/A

## 9 Mitigation Measures

### 9.1 Mitigation measures

No mitigation measures identified.

### 9.2 Monitoring and outcomes

N/A

## 10 Detailed Findings for Indicators

Detailed findings for each Indicator are given in Annex 1.

## 11 Review of Report

### 11.1 Peer review

The Supply Base Report was peer-reviewed by an experienced consultant and another pellet producer.

- Doug Patterson – Renewable Strategies
- Barry Parish – Georgia Biomass

### 11.2 Public or additional reviews

Further review was undertaken during the audit process.





## 13 Updates

N/A. Updates will occur following the initial certification.

### 13.1 Significant changes in the Supply Base

N/A. Updates will occur following the initial certification.

### 13.2 Effectiveness of previous mitigation measures

N/A. Updates will occur following the initial certification.

### 13.3 New risk ratings and mitigation measures

N/A. Updates will occur following the initial certification.

### 13.4 Actual figures for feedstock over the previous 12 months

N/A. Updates will occur following the initial certification.

### 13.5 Projected figures for feedstock over the next 12 months

N/A. Updates will occur following the initial certification.

# Appendix A

## List of Consultees

<b>Certification Standards</b>				
Sustainable Forestry Initiative®	Forest Stewardship Council®	American Tree Farm System™	International Standards Organization	
<b>Certification Bodies</b>				
Advanced Certification	BM TRADA Cert NA, Inc	Bureau Veritas	Rainforest Alliance	Price Waterhouse Cooper
SCS Global Services	QMI - SAI Global			
<b>Natural Resources Agencies</b>				
Bayou Cocodrie National Wildlife Refuge	Catahoula National Wildlife Refuge	D'Arbonne National Wildlife Refuge	Grand Cote National Wildlife Refuge	Handy Brake National Wildlife Refuge
Holt Collier National Wildlife Refuge	Lake Ophelia National Wildlife Refuge	Louisiana Wetland Management District	Overflow National Wildlife Refuge	St. Catherine Creek National Wildlife Refuge
Tensas River National Wildlife Refuge	Upper Ouachita National Wildlife Refuge	Yazoo National Wildlife Refuge	USFWS Endangered Species Program	Mississippi Forestry Commission
Louisiana Agriculture & Forestry	Arkansas Forestry Commission	Texas A&M Forest Service	Homochitto National Forest	USFS Southern Research Station
Ouachita National Forest	Natural Resource Conservation Service-Local Offices	Hot Springs National Park	Big Lake Wilderness	Black Fork Wilderness
Buffalo National River Wilderness	Caney Creek Wilderness	Dry Creek Wilderness	East Fork Wilderness	Flatside Wilderness
Hurricane Creek Wilderness	Leatherwood Wilderness	Poteau Mountain Wilderness	Richland Creek Wilderness	Upper Buffalo Wilderness
Cane Creek State Park	Lake Chicot State Park	Moro Bay State Park	AR Natural Heritage Program	Breton Wilderness
Felsenthal Wildlife Refuge	Kisatchie Hills Wilderness	Lacassine Wilderness	Chemin-A-Haut State Park	Lake D'Arbonne State Park
Chemanihaut State Park	Poverty Point World Heritage Site	Lake Claiborne State Park	Jimmie Davis State Park	Winter Quarters State Historic Site
Lake Bruin State Park	LA Natural Heritage Program	Black Creek Wilderness	Gulf Islands Wilderness	Leaf Wilderness
Clark Creek Nature Area	Percy Quin State Park	Natchez State Park	Lake Lincoln State Park	Mississippi Natural Heritage Program
Kisatchie Hills Wilderness	Caddo Lake State Park	Martin Creek Lake State Park	Atlanta State Park	Texas Natural Heritage Program

<b>Professional Organizations</b>				
Southern Group of State Foresters	Louisiana Forestry Association	Mississippi Forestry Association	Arkansas Forestry Association	Texas Forestry Association
Forest Resources Association	The Forest Guild	American Forest & Paper Association	US Industrial Pellet Association	Composite Panel Association
Association of Consulting Foresters-Local Chapters	Society of American Foresters-Local Chapters	The Wildlife Society	Sustainable Forestry Initiative Implementation Committees	State Tree Farm Committees
National Association of Forest Owners	Forest Landowners Association	Four States Timber Association	National Woodland Owners Association-Local Chapters	East Texas and Southeast Texas Timberland Owners Associations
Mississippi County Forestry Associations-Local Chapters				
<b>Nongovernmental Organizations</b>				
South Wings	Atchafalaya Basin keeper	Gulf Coast Restoration Network	Sierra Club-Delta Chapter	Dogwood Alliance
Natural Resource Defence Council	The Nature Conservancy-Local Chapters	Bat Conservation International	National Wildlife Federation-Local Chapters	Longleaf Alliance
Ducks Unlimited-Local Chapters	Quail Forever	National Wild Turkey Federation	Quality Deer Management Association	
<b>Indigenous Peoples (Federal and State Recognized)</b>				
Coushatta	Chitimacha	Jena, Tunica-Biloxi	Caddo	Biloxi
Choctaw	Clifton-Choctaw	Four Winds	Louisiana Choctaw	Point-Au-Chien
United Houma	Mississippi Band of Choctaw			
<b>Local Government</b>				
Amite County	Morehouse Parish			
<b>Economic Development Organizations</b>				
Bastrop-Morehouse Chamber of Commerce	Louisiana Economic Development (LED)			
<b>Forest Worker Associations/Programs</b>				
American Logging Council	Arkansas Timber Producers Organization	Texas Logging Council	Mississippi Board of Registration for Foresters	Arkansas Board of Registration for Foresters
Louisiana Logging Council-Regional Chapters	American Wood Council			

<b>Academia/Research/Advocacy Institutions</b>				
Univ of Georgia	Univ of Arkansas	Texas A&M	Louisiana State Univ	Mississippi State Univ
Southwest Mississippi Community College	Louisiana Delta Community College	Southeast Arkansas College	Northeast Texas Community College	National Council for Air and Stream Improvement (NCASI)
Oak Ridge National Lab	Biomass101	Two Sides NA	World Resources Institute	
<b>Consultancy</b>				
Dovetail Partners	F&W	Forisk	Forest2Market	
<b>Industry<sup>6</sup></b>				
Transportation Firms	Sawmills	Chip Mills	Timber Dealers	DBI Customers
Current & Potential DBI Suppliers	Logging Firms	Pulp & Paper Manufactures	Institutional Forest Landowners	Real Estate and Forest Management Firms
Service Providers	Biomass Producing Peers	Oriented Strand Board Manufactures		
<b>Law Enforcement &amp; Law Experts</b>				
MS Ag & Commerce Division	LSU Mineral Law Institute	Dendro Resources		

<sup>6</sup> Commercial sensitivity: Specific company names omitted due to current or potential business relationships. Information could be used to gain competitive advantage.

# Appendix B

DBI Sustainability  
2015 Stakeholder Consultation Results  
Summary and Analysis

**Initial Brief Stakeholder Consultation, Held 6.30.2015 thru 7.29.2015**

	<b>Question</b> <small>(corresponds to SBP Std 1 Criteria)</small>	<b>Rating Scale</b> <small>(higher score indicates respondents' heightened confidence/satisfaction with verifiers)</small>	<b>Overall Rating</b> <small>(thresholds set in thirds)</small>	<b>Response Summary</b>	<b>Action Status</b>	<b>Action</b>
Principle 1	level of law enforcement and effectiveness of timber theft laws	1 thru 4	3.38	All comments were supportive and cited the effective role of enforcement agencies. All states rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	enforcement and effectiveness of revenue collection of timber severance taxes	1 thru 4	3.25	Majority of comments were supportive and cited the effective role of enforcement agencies. All states rated within acceptable limits. One comment addressed.	No Action	No new verifiers received from the respondent(s).
Principle 2	species of outstanding and exceptional value identified and protected during forest management activities	1 thru 4	3.71	Sole comment received addressed by verifiers previously included in DBI's SBE for these indicators. All states rated within acceptable limits. One comment addressed.	No Action	No new verifiers received from the respondent(s).
	ecosystem functions, forest health and vitality accessed and maintained through forest management activities	1 thru 5	4.23	Respondents provided supporting comments and contributed verifiers previously included in DBI's SBE with the exception of three additional verifiers. All states rated within acceptable limits. Seven comments addressed.	Complete	Three additional verifiers were included in the SBE as a supplement to existing verifiers for these indicators.
	productivity and ecosystem health of the forest maintained through forest management activities	1 thru 5	4.05	All states rated within acceptable limits. Seven comments addressed.		
	legal, customary and traditional tenure and use rights of indigenous peoples and local communities related to the forest, are identified, documented and respected during forest management activities	1 thru 5	4.66	Respondents provided no comments. All states rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	basic labor rights of forest workers safeguarded	1 thru 5	4.72	Respondents provided one challenging comment. All states rated within acceptable limits. One comment addressed.	No Action	Comment was not supported by evidence or verifiers, nor was it applicable to DBI's raw material procurement area. No new verifiers received from the respondent(s).
	level of labor law enforcement	1 thru 5	4.05			
	appropriate safeguards in place to protect the health and safety of forest workers	1 thru 5	3.25	Respondents provided no comments. All states rated within acceptable limits. Louisiana rated the lowest at 3.00. Overall rating bordered threshold of caution.	None Necessary	No new verifiers or evidence was received from the respondent(s) that corresponded with the lower ratings therefore no specific response or action could be derived. To better inform stakeholders about the robustness of logger training programs, DBI clarified the verifiers of this indicator with additional information pertaining to the curriculum's inclusion of OSHA training.
regional carbon stocks maintained or increased over the medium to long term with the presence of forest management	1 thru 3	2.70	Respondents provided supporting comments and contributed verifiers previously included in DBI's SBE with the exception of one additional verifiers. All states rated within acceptable limits. Five comments addressed.	Complete	One additional verifier was included in the SBE as a supplement to existing verifiers for these indicators.	








DBI Sustainability  
2015 Stakeholder Consultation Results  
Summary and Analysis

**Continued Stakeholder Consultation, Held 11.27.2015 thru 12.11.2015**

Question <small>(corresponds to SBP Std 1 Indicators)</small>	Rating Scale <small>(lower score indicates respondents' heightened confidence/satisfaction with verifiers)</small>	Overall Rating <small>(thresholds set in thirds)</small>	Response Summary	Action Status	Action
<b>Indicator 1.1.1:</b> The Biomass Producer's(BP) Supply Base is defined and mapped. <b>Indicator 1.1.2:</b> Feedstock can be traced back to the defined Supply Base. <b>Indicator 1.1.3:</b> The feedstock input profile is described and categorized by the mix of inputs.	1 thru 5	1.47	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	None Necessary	No new verifiers received from the respondent(s).
<b>Indicator 1.2.1:</b> The BP has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.	1 thru 5	1.47	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	Complete	Brought one verifier to forefront from risk assessment for direct citation to supplement existing verifiers.
<b>Indicator 1.3.1:</b> The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with European Timber Regulation (EUTR) legality requirements	1 thru 5	1.43	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. Two comments addressed.	No Action	No new verifiers received from the respondent(s).
<b>Indicator 1.4.1:</b> The BP has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.	1 thru 5	1.36	Respondents supported verifiers previously included in DBI's SBE and offered clarification for one verifier. Rated within acceptable limits. Two comments addressed.	Complete	Clarified existing verifier included to by providing a resource for confirmation of severance tax payments.
<b>Indicator 1.5.1:</b> The BP has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.	1 thru 5	1.93	Respondents supported verifiers previously included in DBI's SBE. Rated within acceptable limits although within the threshold of caution. One comment addressed.	None Necessary	No new verifiers or evidence were received from the respondent(s) delivering the lower ratings therefore no specific response or action could be derived. Additional information about DBI's control systems included with the existing verifiers for this indicator to provide the stakeholder with more information to make a judgement.
<b>Indicator 1.6.1:</b> The BP has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.	1 thru 5	1.21	Respondents provided and supported verifiers previously included in DBI's SBE and heightened importance of verifiers captured in the cited Risk Assessment. Difficulty comprehending three verifiers provided by respondents. Requested clarification from respondent. Rated within acceptable limits. Two comments addressed.	In Process	Awaiting response from respondent before supplementing existing verifiers with citations.

Principle 1

# Focusing on sustainable sourcing solutions







	<b>Question</b> <small>(corresponds to SBP Std 1 Indicators)</small>	<b>Rating Scale</b> <small>(lower score indicates respondents' heightened confidence/satisfaction in verifiers)</small>	<b>Overall Rating</b> <small>(thresholds set in thirds)</small>	<b>Response Summary</b>	<b>Action Status</b>	<b>Action</b>
Principle 2	<b>Indicator 2.1.1:</b> The BP has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.	1 thru 5	 1.64	Respondents provided and supported verifiers previously included in DBI's SBE and highlighted the importance of three verifiers. Rated within acceptable limits. One comment addressed.	Complete	Three verifiers brought to forefront from risk assessments and two additional verifiers from completed research were included to supplement existing verifiers for this indicator.
	<b>Indicator 2.1.2:</b> The BP has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.	1 thru 5	 1.57	Respondents provided and supported verifiers previously included in DBI's SBE. Rated within acceptable limits. One comment addressed.	None Necessary	No new verifiers received from the respondent(s).
	<b>Indicator 2.1.3:</b> The BP has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.	1 thru 5	 1.64	Respondents provided and supported verifiers previously included in DBI's SBE and also offered one statement for clarification and one additional verifier. Rated within acceptable limits. Three comments addressed.	Complete	One additional verifier received from the respondent(s) added to SBE to supplement existing verifiers. One statement included to clarify that "Poplar" as defined in Europe is not an exotic in the US.
	<b>Indicator 2.2.1:</b> The BP has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimize them.	1 thru 5	 1.62	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	<b>Indicator 2.2.2:</b> The BP has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality.	1 thru 5	 1.38	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	<b>Indicator 2.2.3:</b> The BP has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state.	1 thru 5	 1.62	No comments received. Rated within acceptable limits.	None Necessary	No new verifiers received from the respondent(s).
	<b>Indicator 2.2.4:</b> The BP has implemented appropriate control systems and procedures to ensure that biodiversity is protected.	1 thru 5	 1.77	No comments received. Rated within acceptable limits although at cautionary level.	None Necessary	No new verifiers received from the respondent(s). However, a clarifying statement about natural heritage commissions was added to better inform stakeholders.

# Focusing on sustainable sourcing solutions

Question <small>(corresponds to SBP Std 1 Indicators)</small>	Rating Scale <small>(lower score indicates respondents' heightened confidence/satisfaction in verifiers)</small>	Overall Rating <small>(thresholds set in thirds)</small>	Response Summary	Action Status	Action
<b>Indicator 2.2.5:</b> The BP has implemented appropriate control systems and procedures for verifying that the process of residue removal minimizes harm to ecosystems.	1 thru 5	1.69	Respondents provided and supported verifiers previously included in DBI's SBE and heightened importance of four verifiers captured in the cited risk assessments. Rated within acceptable limits although at the cautionary level. One comment addressed.	Complete	Two additional verifiers generalizing citations brought forth from the risk assessments and directly cited for the indicator. To help better inform stakeholders, two verifiers were included about forest soil nutrient and biomass harvest & BMP studies.
The BP has implemented appropriate control systems and procedures to verify that... <b>Indicator 2.2.6:</b> to verify that negative impacts on ground water, surface water and water downstream from forest management are minimized. <b>Indicator 2.2.7:</b> air quality is not adversely affected by forest management activities.	1 thru 5	1.54	Respondents provided and supported verifiers previously included in DBI's SBE and heightened importance of four verifiers captured in the cited risk assessments. Rated within acceptable limits. Three comments addressed.	Complete	Four verifiers brought to forefront from the risk assessments for direct citation in this indicator. One additional verifier added to the preamble to supplement existing verifiers used throughout the SBE.
The BP has implemented appropriate control systems and procedures for verifying that... <b>Indicator 2.2.8:</b> there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities. <b>Indicator 2.2.9:</b> methods of waste disposal minimize negative impacts on forest ecosystems.	1 thru 5	1.62	Respondents provided one additional verifier. Rated within acceptable limits. One comment addressed.	Complete	One additional verifier added to the preamble to supplement existing verifiers used throughout the SBE.
<b>Indicator 2.3.1:</b> Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data. <b>Indicator 2.3.2:</b> Adequate training is provided for all personnel, including employees and contractors. <b>Indicator 2.3.3:</b> Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.	1 thru 5	1.54	Respondents provided and supported verifiers previously included in DBI's SBE all the while providing one additional verifier and two clarifying statements. Rated within acceptable limits. Addressed three comments.	Complete	One additional verifier provided was included to supplement existing verifiers and two clarifying statements adopted for this indicator.
The BP has implemented appropriate control systems and procedures for verifying that... <b>Indicator 2.4.1:</b> the health, vitality and other services provided by forest ecosystems are maintained or improved. <b>Indicator 2.4.2:</b> natural processes, such as fires, pests and diseases are managed appropriately. <b>Indicator 2.4.3:</b> there is adequate protection of the forest from unauthorized activities, such as illegal logging, mining and encroachment.	1 thru 5	1.59	Respondents provided comments heightening the importance of two verifiers from the cited risk assessments. Rated within acceptable limits. Two comments addressed.	Complete	One verifier previously added to preamble due to being applicable to the majority of the indicators. One verifier brought to forefront from risk assessments to supplement existing verifiers for this indicator.



## Focusing on sustainable sourcing solutions

Question <small>(corresponds to SBP Std 1 Indicators)</small>	Rating Scale <small>(lower score indicates respondents' heightened confidence/satisfaction in verifiers)</small>	Overall Rating <small>(thresholds set in thirds)</small>	Response Summary	Action Status	Action	
<p>The BP has implemented appropriate control systems and procedures for verifying that... <b>Indicator 2.5.1:</b> legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected. <b>Indicator 2.5.2:</b> production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfillment of basic needs.</p>	1 thru 5	 1.50	<p>Respondents provided two additional verifiers. Rated within acceptable limits. Two comments addressed.</p>	None Necessary	<p>One verifier provided was previously added to preamble due to being applicable to the majority of the indicators. One verifier provided deemed adequately covered in preamble.</p>	
<p><b>Indicator 2.6.1:</b> The BP has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.</p>	1 thru 5	 1.54	<p>Respondents provided and supported verifiers previously included in DBI's SBE all the while providing one verifier previously included in the risk assessments. Rated within acceptable limits. One comment addressed.</p>	Complete	<p>One additional verifier brought forth from the risk assessment for direct citation as a supplement to existing verifiers used for this indicator.</p>	
<p>Principle 2</p>	<p>The BP has implemented appropriate control systems and procedures for verifying... <b>Indicator 2.7.1:</b> that Freedom of Association and the effective recognition of the right to collective bargaining are respected. <b>Indicator 2.7.2:</b> that feedstock is not supplied using any form of compulsory labor. <b>Indicator 2.7.3:</b> that feedstock is not supplied using child labor. <b>Indicator 2.7.4:</b> that feedstock is not supplied using labor which is discriminated against in respect of employment and occupation. <b>Indicator 2.7.5:</b> that feedstock is not supplied using labor which is discriminated against in respect of employment and occupation.</p>	1 thru 5	 1.38	<p>Respondents provided heightened importance for a verifier contained with the cited risk assessments. Rated within acceptable limits. One comment addressed.</p>	Complete	<p>Brought verifier to forefront from the risk assessments and included as a supplement to the exiting verifiers used for this indicator.</p>
	<p><b>Indicator 2.8.1:</b> The BP has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers.</p>	1 thru 5	 1.46	<p>Respondents provided heightened importance for a verifier contained with the cited risk assessments. Rated within acceptable limits. One comment addressed.</p>	No Action	<p>Citation of the risk assessments and associated evidence used for third party certification suffices. Verifier was not added to the indicator.</p>
	<p><b>Indicator 2.9.1:</b> Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks. <b>Indicator 2.9.2:</b> Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.</p>	1 thru 5	 1.54	<p>Respondents provided and supported verifiers previously included in DBI's SBE and also offered a clarifying statement. Rated within acceptable limits. One comment addressed.</p>	Complete	<p>One verifier modified to be more inclusive of forest inventory systems (i.e. USFA &amp; MIFI).</p>
<p><b>Indicator 2.10.1:</b> Genetically modified trees are not used.</p>	1 thru 5	 1.54	<p>One respondent provided a challenging statement directed towards the prohibition of GMOs by the SBP standard. Rated within acceptable limits. One comment addressed.</p>	No Action	<p>No new verifiers received from the respondent(s).</p>	

# Annex 1: Detailed Findings for Supply Base Evaluation Indicators

## Preamble

### **Leading and broad means of verification applicable to the majority of indicators:**

The existence and effective application of state and federal legislation provides a key verifier that allows suppliers and forest landowners located within the defined fiber catchments to operate in a social system upheld by the "rule of law". This allows democratic participation in governance. Third party certifications are evidence that ABE is complying with applicable legislation, regulations and/or accepted practices supported by company policies that meet or exceed expectations of the certifying body. DBI's management system, internal processes and policies are reviewed as part of the external third party audits associated with the certifications listed.

Verifiers are notated as **internal**<sup>1</sup> or external verifiers. All verifiers are reviewed by third party auditors but only external verifiers are publically available.

#### Sustainable Forestry Programs:

- [DBI Certificates](#)
- [Sustainable Forestry Initiative® \(SFI\) Certification](#) and [Public Audit Summary](#)
- [Programme for the Endorsement of Forest Certification™ \(PEFC\) Certification](#)
- [Forest Stewardship Council® \(FSC\) Certification and Public Risk Assessment](#)
- [Sustainable Biomass Partnership \(SBP\) intent to certify statement](#)
- [American Tree Farm System™ Certification](#)

#### Landscape Level Risk Assessments:

- [Draft FSC® US National Controlled Wood Risk Assessment](#) (US NRA)
- [Global Forest Registry](#)
- [FSC® Controlled Wood Risk Assessments](#) (CWRA) in fiber procurement catchments
- **PEFC™ Due Diligence System (DDS) in fiber procurement catchments**

#### Supporting Company Policies and Procedures:

- [Drax Environmental Policy](#)
- [Drax Sustainability Policy](#)
- [Drax Health and Safety Policy](#)
- [DBI's Commitment to Sustainable Forestry](#)
- **DBI's Sustainability Program Procedures and Records**

	Indicator
<b>Applicable</b>	
<b>1.1.1</b> <b>1.1.2</b> <b>1.1.3</b>	The Biomass Producer's Supply Base is defined and mapped. Feedstock can be traced back to the defined Supply Base. The feedstock input profile is described and categorised by the mix of inputs.
<b>Finding</b>	<ul style="list-style-type: none"> <li>• Drax Biomass Inc.'s ("DBI" or "Company") fiber procurement catchment includes southern Arkansas, Louisiana, Mississippi and eastern Texas in the United States. The Company owns and operates two pellet plants: Amite BioEnergy LLC ("Amite BioEnergy" or "ABE") in Gloster, MS; and Morehouse BioEnergy LLC ("Morehouse BioEnergy" or "MBE") near Beekman, LA. Both plants draw feedstock within a 70-mile radius, but maintain the ability to procure out to a 90-mile radius in response to market pressures and weather events.</li> </ul>

<sup>1</sup> Internal verifiers are only viewable by external auditors and not the general public due to the proprietary nature of the systems.

	<p>All statements based on the 90-mile radius are made for precautionary purposes. Specifically, ABE procures fiber from Mississippi and Louisiana.</p> <ul style="list-style-type: none"> <li>• ABE consumes biomass feedstock comprised of low grade roundwood, thinnings, tops, and logging residues and mill residuals from the species group southern yellow pine (SYP) with minority components of mixed southern hardwoods.</li> <li>• Binding <b>contractual requirements</b> stipulate that suppliers disclose the source's origination information to establish a gate pass before loads enter mill sites.</li> <li>• Robust <b>transaction accounting system</b> captures sustainability characteristics about the source upon establishment and assigns relational information to each load registered upon delivery.             <ul style="list-style-type: none"> <li>○ Transaction accounting system captures designation of the inputs and species groups.</li> <li>○ Control points are established and <b>training</b> has occurred to ensure only sources of known origin enter mill sites.</li> </ul> </li> <li>• DBI holds verified SFI®, PEFC™ and FSC® Chain of Custody certificates substantiating that all feedstock is assessed for origination.</li> <li>• Majority of feedstock inputs are from primary sources with minority portion from secondary sources.</li> </ul>
Means of Verification	<p>Lead Verifier: <b>Administrative and fiduciary responsibilities</b> to tax law have been defined and implemented which charges businesses to identify and capture the district of origin of fiber to enable states to assign and collect severance taxes. Third party audits of sustainability programs evidences the presence of a functioning <b>supply chain management system</b> that complies with the legal requirements to track and trace raw material. Third party audits also assures that accurate material inputs are defined and captured (i.e. species and fiber type) while being derived from within the boundaries of a risk assessed region.</p> <p>Additional Citations:</p> <ul style="list-style-type: none"> <li>• <a href="#">Forest Property Taxation Systems in the United States</a>: Each jurisdiction has its unique version of record retention and/or payment periods for timber purchases.</li> <li>• Preamble Citations</li> <li>• <b>Professional fiber procurement and sustainability consultancy</b></li> <li>• <b>Transactional accounting system records</b></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
Comment or Mitigation Measure	<p>None</p>

	Indicator
1.2.1	The Biomass Producer has implemented appropriate control systems and procedures to ensure that legality of ownership and land use can be demonstrated for the Supply Base.

Finding	<ul style="list-style-type: none"> <li>• DBI has implemented a <b>procedure</b> to ensure a defined response of preferred actions to handle identified non-compliant material in relation to compliance with the Timber Standard and EUTR.</li> <li>• DBI has implemented a CWRA and <b>DDS</b> presenting the <b>laws utilized in the US and each state</b> sourced from to showcase the rule of law and public agency governance.</li> <li>• Annual review of CWRA and <b>DDS</b> to substantiate “low risk” determination.</li> <li>• Level of enforcement and effectiveness is evident in news reports and timber trespass is not systemic in procurement catchment.</li> <li>• DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in the procurement regions.</li> <li>• Suppliers are required to abide by all laws and regulations in <b>master gatewood purchase agreement (GWPA)</b>.</li> <li>• The World Bank has awarded the U.S. a Global Governance Index rating that exceeds 92% for Regulatory Quality (average from 1996-2014).</li> </ul>
Means of Verification	<p>Lead Verifier: Risk assessments (listed in preamble) ranging from company to landscape levels have captured the existence and effectiveness of statutory, contractual, property and civil law in the defined supply base. Property law is well established and policed through effective courts. Land use challenges absent and legal processes are present to establish and challenge land ownership in the wood procurement region.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• Stakeholder Consultation</li> <li>• Certificate of incorporation: Auth # 2211437 and File #: 5068290 <a href="#">verified</a></li> <li>• <b>Transactional accounting system records</b></li> <li>• <a href="#">Forest Action Plans</a> and <a href="#">Wildlife Action Plans</a></li> <li>• <a href="#">Southern Forest Futures Project</a></li> <li>• <a href="#">Southern Forests for the Future, Maps</a></li> <li>• <a href="#">Local zoning ordinances</a></li> <li>• <a href="#">The Global Governance Index for the United States</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
Comment or Mitigation Measure	None

	Indicator
1.3.1	The BP has implemented appropriate control systems and procedures to ensure that feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements.
Finding	<ul style="list-style-type: none"> <li>• Each state ABE sources from has timber trespass and theft legislation, governing public agencies and enforcement bodies.</li> <li>• DBI has implemented a CWRA and <b>DDS</b> presenting the laws utilized in the US. Each state sourced from has established rule of law and public agency governance. A review of numerous sources provided a low risk rating for Illegally Harvested Wood in the entire US.</li> </ul>

	<ul style="list-style-type: none"> <li>Level of enforcement and effectiveness is evident in news reports and timber trespass is not systemic in procurement catchments.</li> <li>DBI has implemented a <b>procedure</b> to ensure a defined response of preferred actions to handle identified non-compliant material in relation to compliance with the Timber Standard and EUTR.</li> <li>Illegal logging website's only references to the United States are in reference to U.S.-based companies operating in other countries and regarding the Lacey Act.</li> <li>EIA website's only cites the United States with regards to U.S.-based companies operating in other countries concerning the Lacey Act.</li> <li>Annual review of CWRA and <b>DDS</b> to substantiate "low risk" determination.</li> <li>DBI conducted a comprehensive stakeholder consultation to capture feedback about legality issues in procurement regions.</li> <li>Suppliers are obligated to abide by all laws and regulations by signatory of <b>GWPA</b>.</li> <li>Thesis by Timothy Hicks and compendium by Defenders of Wildlife provides a list of forestry laws regarding illegal trespass. This publication provides a listing of all applicable State laws for forestry within each State.</li> </ul>																				
Means of Verification	<p><u>Lead Verifier</u>            Timber trespass and theft legislation, governing public agencies and enforcement bodies are existent and effective. Right to sell material is clearly established as part of legal contract. <b>Management systems, internal processes and company policies</b> reviewed as part of third party certifications.</p> <table border="1" data-bbox="331 1039 1369 1400"> <thead> <tr> <th>Texas</th> <th>Mississippi</th> <th>Louisiana</th> <th>Arkansas</th> <th>Federal</th> </tr> </thead> <tbody> <tr> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">US: Lacey Act</a></td> </tr> <tr> <td><a href="#">Publication explaining timber theft law.</a></td> <td><a href="#">Annual report presenting enforcement action stats</a></td> <td><a href="#">Timber theft cases and litigation discloser via search engine.</a></td> <td><a href="#">Annual reports presenting enforcement action stats.</a></td> <td><a href="#">Enforcement Action: Article summarizing recent cases.</a></td> </tr> <tr> <td><a href="#">Enforcement action example.</a></td> <td><a href="#">Article presenting enforcement action stats for past two years.</a></td> <td></td> <td></td> <td>Third party review of effectiveness of laws: <a href="#">Environmental Investigation Agency</a></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Preamble citations</li> <li>Annual review of CWRA and <b>DDS</b> to substantiate "low risk" determination</li> <li>Stakeholder Consultation</li> <li><b>Transactional system reports</b></li> <li><a href="#">Timber theft resources by state</a>, Forest 2 Market</li> <li>"<a href="#">Illegal Logging and Global Wood Markets</a>", Seneca Creek Assoc and World Resources Institute</li> <li><a href="#">Assessment of Lawful Harvesting and Sustainability of US Hardwood Exports</a>, American Hardwood Export Council</li> <li><a href="#">Illegal logging portal</a></li> <li><a href="#">A Nationwide Survey of Timber Trespass Legislation</a>. Hicks, Timothy. Master of Forestry Thesis March 2005 PSU School of Forest Resources.</li> <li><a href="#">State Forestry Laws</a>. Defenders of Wildlife, October 2000.</li> </ul>	Texas	Mississippi	Louisiana	Arkansas	Federal	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">US: Lacey Act</a>	<a href="#">Publication explaining timber theft law.</a>	<a href="#">Annual report presenting enforcement action stats</a>	<a href="#">Timber theft cases and litigation discloser via search engine.</a>	<a href="#">Annual reports presenting enforcement action stats.</a>	<a href="#">Enforcement Action: Article summarizing recent cases.</a>	<a href="#">Enforcement action example.</a>	<a href="#">Article presenting enforcement action stats for past two years.</a>			Third party review of effectiveness of laws: <a href="#">Environmental Investigation Agency</a>
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Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>																				
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>																				
Comment or Mitigation Measure	None																				

	Indicator			
1.4.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.			
Finding	<ul style="list-style-type: none"> <li><b>Operational Control Procedures for Wood Procurement</b> states "establishment of account includes the payment of severance taxes to the appropriate authority."</li> <li>Load receipts and <b>vendor statements</b> are issued to suppliers for reconciliation with landowners.</li> <li>Each jurisdiction has its very own version of record provisions and/or payment periods for timber purchases. DBI exceeds the most stringent with record retention policies.</li> </ul>			
	Mississippi	Louisiana	Arkansas	Texas
	<a href="#">Payment window and access to load tickets</a>	<a href="#">Provide load tickets and loader logs</a>	<a href="#">Payment window</a>	<a href="#">Payment window and load tickets</a>
	<ul style="list-style-type: none"> <li>No export taxes or duties are required for sale of pellets.</li> <li><b>Severance taxes are paid on behalf of the supplier by</b> DBI allowing the landowner to produce the filing/return with the proper tax authority.</li> <li>Secretary of State Certificate of good standing and no tax liens exists for Amite BioEnergy LLC, Morehouse BioEnergy LLC, or Baton Rouge Transit LLC</li> </ul>			
Means of Verification	<p><u>Lead Verifier:</u> Effective application of State and Federal legislation in respect of customs and duties, especially dealing with assessments and collections. Each jurisdiction has its very own version of record retention and/or payment periods for timber purchases. Strong contractual law drives compliance. <b>Management systems, internal processes and company policies</b> reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li><b>Transaction System Records</b></li> <li>DBI's <b>receipts of paid severance tax</b>, tax liens and filing status (Ex: <a href="#">LA Dept of Revenue</a>, <a href="#">MS Tax Lien Register</a>)</li> <li>DBI's Certificates of Good Standing (Ex: <a href="#">Louisiana Sec of State</a>, <a href="#">Mississippi Sec of State</a>)</li> <li><a href="#">Timber severance tax by state.</a></li> <li><a href="#">Drax Annual Report</a></li> </ul>			
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>			
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b>	<input type="checkbox"/> <b>Specified Risk</b>	<input type="checkbox"/> <b>Unspecified Risk at RA</b>	
Comment or Mitigation Measure	none			

	Indicator	
1.5.1	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is supplied in compliance with the requirements of CITES.	
Finding	<ul style="list-style-type: none"> <li>Annual review of CWRA and <b>DDS:</b> CRWA and <b>DDS</b> for ABE's procurement area was determined to be "low risk" which includes an evaluation consulting that no commercial tree CITIES species occur in wood procurement catchments.</li> <li>ABE does not procure any species that are currently listed in CITES. <a href="#">Reviewed CITES website to determine the US ratified in 1974 and no trade suspensions with the US exists.</a></li> </ul>	

	<ul style="list-style-type: none"> <li>In the United States, CITES enforcement is a Federal responsibility and is shared between US Customs and Border Protection (Customs), the Animal and Plant Health Inspection Service (APHIS) and the US Fish and Wildlife Service (USFWS). USFWS is the official U.S. CITES management authority.</li> <li><b>GWPA</b> obligates suppliers to abide by all laws and regulations as a signatory.</li> </ul>
Means of Verification	<p><u>Leading Verifier:</u> CITES list is available and reviewed periodically. CITES is administered enforced by public agencies with robust governance. Third party audits of sustainability programs evidences the presence of a functioning <b>supply chain management system</b> that assures accurate material inputs are defined and captured (i.e. species and fiber type).</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li><b>Transactional System Records</b></li> <li><a href="#">Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973)</a></li> <li><a href="#">Amendment to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Art.XI) (Bonn, Germany, 23 Jun 1979)</a></li> <li><a href="#">The Enforcement of CITES in the US</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	<p>none</p>

	Indicator
<b>1.6.1</b>	The Biomass Producer has implemented appropriate control systems and procedures to ensure that feedstock is not sourced from areas where there are violations of traditional or civil rights.
Finding	<ul style="list-style-type: none"> <li>Recognized and equitable processes are in place to resolve conflicts of substantial magnitude pertaining to traditional rights. Though not ratified, the United States is in overall compliance with the ILO Convention 169, which addresses customs and beliefs, education and training, health services, land rights, social security, protection of language and culture, and pay and working conditions.</li> <li>The legal system in the United States is generally considered fair and efficient in resolving conflicts pertaining to traditional rights including use rights, cultural interests or traditional cultural identity. There are different mechanisms or processes that allow Native American tribes, as well as any private citizen, to deal with disagreement and conflict related to decisions affecting natural resources, and forests in particular that are considered to be equitable. Note the list of Federal Acts Below</li> <li>Communications with tribes located in procurement region occurred during the formation of the CWRA and via the stakeholder consultation.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Existence and effective application of federal and state legislation and conventions for these aspects provides protection and recourse if breached. Programs available to contribute to improved circumstances for indigenous tribes. Management systems, internal processes and company policies reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li>Stakeholder Consultation</li> <li><a href="#">American Indian Religious Freedom Act of 1978 (amended 1994)</a></li> <li><a href="#">Indian Child Welfare Act of 1978</a></li> <li><a href="#">Indian Citizenship Act of 1924</a></li> <li><a href="#">Indian Self-Determination and Education Assistance Act of 1975</a></li> </ul>



	<ul style="list-style-type: none"> <li>• <a href="#">Native American Languages Act of 1990</a></li> <li>• <a href="#">Tribal Law and Order Act of 2010</a></li> <li>• <a href="#">ILO Convention 169</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
2.1.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that forests and other areas with high conservation values are identified and mapped.
2.1.2	The Biomass Producer has implemented appropriate control systems and procedures to identify and address potential threats to forests and other areas with high conservation values from forest management activities.
Finding	<ul style="list-style-type: none"> <li>• Drax Environmental Policy states "Staff are encouraged to identify areas where environmental improvements may be made, either to on-site impacts or to those caused by our procurement or by our suppliers."</li> <li>• DBI's Commitment to Sustainable Forestry states that "DBI is committed to implement its best efforts to avoid trading and sourcing wood from c) Wood harvested in forests where high conservation values are threatened by management activities."</li> <li>• <b>DBI Procedures</b> state "The review should include an assessment of the location of the tract, to determine whether there are known sensitivities. If known sensitivities exist, the procuring manager will liaise with the VP of procurement before deciding whether to accept the sale. Acceptance can take place if risk is low, or if controls are put in place to make risk of harm low."</li> <li>• WWF-Ca: "As far as Criterion 6.4 goes, more than 60% of certificate holders overall have identified candidate protected areas, or are in the process of doing so, and this is encouraged by the large number of CARs issued by auditors to this effect (in over half the certificates reviewed). This supports the view that the FSC process is working to favour the inclusion of conservation planning in resource use planning processes."</li> <li>• There are no WRI/Global Forest Watch Frontier Forests, Conservations International Hotspots, Smithsonian/IUCN Centres of Plant Diversity, or Greenpeace Intact Forests listed within ABE's supply area. The sole WWF Global 200 #75 – the <a href="#">Southeastern Coniferous and Broadleaf Forest</a> was dealt with as part of the AHEC study and the conditions have not changed.</li> <li>• Draft <a href="#">map issued by FSC</a> available online. This online resource indicates that there are very limited risks within the catchments to the plants.</li> <li>• No proposals located in US for IUCN Green List as of yet.</li> <li>• Convention on Biological Diversity: No programs of work exists for the US as of yet.</li> <li>• RAMSAR sites: two named sites at far reaches of fiber procurement basins- Catahoula Lake, LA and Caddo Lake, TX. All sites have NGO involvement and protected by state and/or federal laws.</li> <li>• Landscape Conservation Cooperative Network under development for the Gulf Coastal Plains and Ozarks.</li> <li>• Knowledge and awareness of regional conservation programs via SFI participation.</li> </ul>

	<ul style="list-style-type: none"> <li>Review of other CWRAs from region to monitor for additional sensitivities</li> <li>Provision of low grade fiber market inherently enhances the value and health of forests</li> <li><b>Track and Trace system</b></li> <li><b>GWPA</b> obligates suppliers to abide by all laws and regulations, achieve logger training and implement forestry best management practices as a signatory.</li> </ul>
Means of Verification	<p><u>Lead Verifier</u> Effective implementation of the <u>Endangered Species Act</u>. State and Federal lands set aside in park system, wildlife management reserves, conservation easements, etc that receive statutory protection. Information resources and maps of <u>high conservation valued areas</u> and <u>protected areas</u> available for the wood procurement region. <b>Management systems, internal processes</b> and company policies reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li><b>SFI Evidence Matrix:</b> i.e. involvement with SFI SICs and inconsistent practices processes.</li> <li><b>Transactional system records</b></li> <li><b>Annual supplier and SFI SIC communications</b></li> <li><u>Logger training curriculums and stats by state report, SGSF</u></li> <li><u>Nature Serve Data</u></li> <li>Non Governmental Organizations: Ex <u>The Nature Conservancy</u>, <u>Global Forest Watch</u>, etc</li> <li><u>Habitat Conservation Plans</u></li> <li><u>Forest Stewardship Programs</u></li> <li><u>Various Regional Conservation Programs</u></li> <li><u>Evaluating Conservation Gains in North America through HCVF Assessments, WWF-Canada</u></li> <li><u>High Conservation Value Resource Network</u></li> <li><u>Forestry HCPs Reference Guide</u></li> <li><u>Conservation Easement Map</u></li> <li><u>USFWS Critical Habitat</u></li> <li><u>World Wildlife Fund: WWF Maps</u></li> <li><u>Convention on Biological Diversity: Forest Biodiversity</u></li> <li><u>IUCN Green List</u></li> <li><u>RAMSAR</u></li> <li><u>Landscape Conservation Cooperative Networks</u></li> <li><u>State Forest Action Plans</u></li> <li><u>State Wildlife Action Plans</u></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
2.1.3	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.
Finding	<ul style="list-style-type: none"> <li><b>DBI procedures</b> specify pine knowing that minor amounts of hardwoods will arrive on occasion. ABE uses primarily southern yellow pine (SYP) with minority amounts of southern mixed hardwoods of which are all native and naturally occurring species. Many</li> </ul>

	<p>components of these wide range of species may appear when in-woods chipping occurs. <b>Internal audits</b> prompts for species review to compare as declared on <b>purchase orders</b>.</p> <ul style="list-style-type: none"> <li>• ABE does not accept biomass derived from land conversion activities in which the land will be occupied by a declared use that will hinder reforestation in the long term.</li> <li>• Net increase in forested acreage or growth.</li> </ul>
Means of Verification	<p><b>Lead Verifier:</b> Rarity of SBP defined "production plantation forests" in wood procurement region. Identify and monitor trends in forest growth and changes in land use via reliable resources and technologies. Identify and monitor results of drivers that persuade landowner behaviour. <b>Management systems, internal processes</b> and company policies governing these aspects reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">Forest Inventories</a> and <a href="#">Timber Products Output Reports</a></li> <li>• <a href="#">State Forest</a> and <a href="#">Wildlife</a> Action Plans</li> <li>• Remote Sensing, i.e. <a href="#">Global Forest Watch</a></li> <li>• <a href="#">Land Cover National Dataset</a>, evergreen</li> <li>• <a href="#">FAO's Definitions Related to Planted Forests</a></li> <li>• Land use change monitoring on landscape level, i.e. <a href="#">Southern Forest Futures Project</a></li> <li>• Tax Abatements and Land Use Tax Regimes by jurisdiction drive land use determinations</li> <li>• Reforestation monitoring (ex. Nursery reports, forestry commission reports, etc.)</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
Comment or Mitigation Measure	<p>none</p>

	Indicator
<b>2.2.1</b>	<p>The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is sourced from forests where there is appropriate assessment of impacts, and planning, implementation and monitoring to minimise them.</p>
Finding	<ul style="list-style-type: none"> <li>• BMPs are in place for all States that Drax sources wood. In addition, SFI committees operate in all these states and provide training for loggers and on BMP requirements.</li> <li>• Federal cost-share assistance programs for forestry projects include the Forestry Incentive Program, the Conservation Reserve Program, the Wetlands Reserve Program, the Stewardship Incentives Program, the Environmental Quality Incentives Program, etc.</li> <li>• Louisiana, Mississippi, and Texas established forestry cost-share programs in 1998, 1974, and 1981 respectively. Arkansas does not currently have a tax program in place however, it does have a Wetland and Riparian Zone Tax Credit as well as other incentives for forestry and agriculture. Cost-share programs are designed to help NIPF landowners by reducing their initial costs for reforestation and improving rates of return.</li> <li>• Arkansas (1978), Louisiana (1976), Mississippi (1980), and Texas (1979) all have some variant of current use laws in place for forestry activities.</li> <li>• Federal statutes affecting forest management in the South listed in CWRA.</li> <li>• The South is unique among regions of the United States in that none of its States has a comprehensive forest management act. Few of the State-level PR policies directly address forestry and forest management. States do, however, have regulations to protect water quality, air quality, and endangered species, and to control pesticide use.</li> <li>• <b>GWPA</b> obligates supplier to abide by all laws and regulations, BMPs, use trained loggers and follow sustainability policy.</li> </ul>
Means of Verification	<p>Lead Verifier: Key ecosystems are protected under various Federal and State programs. Hydrologic systems are protected by the <a href="#">Clean Water Act</a>. The presence of market driven</p>

	<p>and <a href="#">sanctioned logger training curriculums</a> and <a href="#">acceptable BMP implementation rates</a>. Landowner assistance programs present, available and effective. <b>Management systems, internal processes</b> and company policies governing these aspects reviewed as part of third party certifications.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">NEPA Annual Reports</a></li> <li>• <a href="#">State BMP Manuals</a></li> <li>• <a href="#">Federal cost-share programs for forestry</a></li> <li>• <a href="#">National Conservation Easement Database</a></li> <li>• <a href="#">USFWS Critical Habitat Map</a></li> <li>• <a href="#">State level cost share programs for forestry</a></li> <li>• States have version of current use laws for forestry activities</li> <li>• State Forest Fact Sheets, Ex <a href="#">Mississippi</a></li> <li>• Tax Abatements and Land Use Tax Regimes by jurisdiction Ex. <a href="#">Arkansas forestry manual</a></li> <li>• <a href="#">Logger training curriculums and stats by state report, SGSF</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.2.2</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is sourced from forests where management maintains or improves soil quality (CPET S5b).
Finding	<ul style="list-style-type: none"> <li>• All four States that Drax sources wood from have Forestry Best Management Practices (BMPs). These BMPS are in place for water quality but also include recommendations for effective planning for soil stabilization during all phases of silviculture and forest road construction. Years of research has demonstrated the effectiveness of water quality BMPs, with documented implementation rates for covered practices often approaching 90%.</li> <li>• Numerous studies by Federal and State level forestry agencies and researchers have indicated that following BMP reduces the loss of soils, soil compaction, and soil migrating into water bodies.</li> <li>• Biomass markets provide support to landowners owning and managing forests therefore attributing to the soil quality due to the presence of the forest. Responsible disturbance of the forest is needed to provide regeneration in all forest types therefore continuing to add to soil productivity.</li> <li>• One study found that soil compaction had a positive effect on stand volume and caused no substantial reduction in soil carbon storage or understory diversity (Soil Ecosystem Services in Loblolly Pine Plantations 15 Years after Harvest, Compaction, and Vegetation Control, Soil Science Society of America Journal October 31, 2014 Scott et al)</li> <li>• DBI Gatewood Purchase agreement mandates that Sellers follow good and accepted forestry practices and agrees to abide by BMPs. Supplier is subject to internal audit.</li> </ul>
Means of Verification	<p><u>Leading Verifier:</u> <a href="#">Best Management Practices</a> for forestry are established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. A catalogue of enforceable laws contributes to the maintenance of these attributes. <a href="#">High levels of trained loggers</a> are present due to market requirements.</p> <ul style="list-style-type: none"> <li>• <b>F&amp;W BMP Implementation Report</b> for ABE's Procurement Region, 2015</li> <li>• <a href="#">USGS Soil Maps</a></li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Protected Areas of the US</a></li> <li>• <a href="#">BMP Implementation Compliance Data, Southern Group of State Foresters</a></li> <li>• <a href="#">Almanac of Enforceable State Laws to Control Nonpoint Source Water Pollution</a></li> <li>• <a href="#">NCASI Technical Bulletin No. 966: Compendium of Forestry BMPs for Controlling Nonpoint Source Pollution in N.A.</a></li> <li>• <a href="#">How Forestry is Regulated Under the Clean Water Act,</a></li> <li>• AFOA <a href="#">Soil Ecosystem Services in Loblolly Pine Plantations 15 Years after Harvest, Compaction, and Vegetation Control, Soil Science Society of America Journal October 31, 2014 Scott et al</a></li> <li>• <a href="#">Implementation of Forestry BMPs: A Southern Region Report, 2008 and 2012</a></li> <li>• <a href="#">State BMP Manuals</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.2.3</b>	The Biomass Producer has implemented appropriate control systems and procedures to ensure that key ecosystems and habitats are conserved or set aside in their natural state (CPET S8b).
Finding	<ul style="list-style-type: none"> <li>• DBI has at its disposal a robust <b>DDS</b> with data provision from NatureServe and various other public agencies to assess sensitives within the procurement catchment.</li> <li>• Effective and enforced environmental laws on the national and state levels are in place to ensure conservation of special resources.</li> <li>• The largest share—land used for outdoor recreation and land being maintained in its natural/wild/preserved state—is estimated at 252 million acres (80 percent of the special uses total). This acreage can be further dissected into National and State parks (32 percent of the special uses total) and wilderness/ wildlife uses (49 percent of the special uses total). Of the total acreage used for parks, recreation, and wildlife purposes in 2007</li> <li>• Nearly two-thirds of the estimated increase in special-use land over 2002-07 resulted from a nearly 10-million-acre increase in rural parks and wildlife/wilderness land. Driving this number are substantial increases in Federally owned outdoor recreation and preservation areas, State-owned fish and wildlife areas, and State parks. Complementary ERS research shows that these increases in rural natural amenities are associated with increasing rural population and job growth (USDA/ERS, 2011).</li> <li>• Comprehensive wildlife action plans (inclusive of habitat considerations) have been established for each state.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Key ecosystems and habitats set aside and <a href="#">protected on Federal and State lands</a>. Private lands with key ecosystems and habitats are assisted with various Federal and State programs. Explicit protection of these attributes are delivered by well governed public agencies and reputable <a href="#">Non Governmental Conservation Groups</a>. Existence and application of conservation laws such as <a href="#">Endangered Species Act</a> and the <a href="#">Clean Water Act</a>.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• The <a href="#">Endangered Species Protection Program</a>, State and Federal Versions</li> <li>• Examples of Federal Legislation and Programs: Clean Water Act (section 404 for wetland protection) requires permit for permanent fill placed into wetlands, Standards Grants Program, Forest Resource Development Program (FRDP), The Landowner Incentive Program (LIP), North American Wetland Conservation Act Grants (NAWCA),The Conservation Reserve Program (CRP),Environmental Quality Incentives</li> </ul>

	<p>Program (EQIP), Healthy Forest Reserve, The Wetlands Reserve Program (WRP), The Wildlife Habitat Incentives Program (WHIP), Mississippi Partners for Fish and Wildlife Program (MPFW), The Army Compatible Use Buffer Program (ACUB), USFWS Safe Harbor program, Convention on Nature Protection</p> <ul style="list-style-type: none"> <li>• Examples of State Programs: The Mississippi Scenic Streams Stewardship Program (SSSP) and SGCN dependent on forest communities (See Appendices III, IV and V), The State Wildlife Grants Program (SWG), The Mississippi Natural Heritage Program (MNHP), CHAPTER 4: EXISTING CONSERVATION PROGRAMS FOR FOREST RESOURCES, MISSISSIPPI'S FOREST LEGACY PROGRAM, Mississippi Wildlife Heritage Fund, Mississippi Partners for Fish and Wildlife Program (MPFW)</li> <li>• <a href="#">Nature Serve</a></li> <li>• <a href="#">Global Forest Watch</a></li> <li>• <a href="#">Federal and State Land Ownership and Jurisdiction</a></li> <li>• <a href="#">National Conservation Easement Database</a></li> <li>• <a href="#">USFWS Critical Habitat Map</a></li> <li>• <a href="#">Protected Areas of the US</a></li> <li>• <a href="#">Logger training curriculums and stats by state report, SGSF</a></li> <li>• <a href="#">NEPA Annual Reports</a></li> <li>• <a href="#">Forest</a> and <a href="#">Wildlife</a> Action Plans</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
2.2.4	The Biomass Producer has implemented appropriate control systems and procedures to ensure that biodiversity is protected (CPET S5b).
Finding	<ul style="list-style-type: none"> <li>• States ABE sources from and the federal agencies implement and enforce a plethora of laws to ensure that biodiversity is maintained across the landscape.</li> <li>• Private sector firms demonstrate compliance with mandatory laws and with voluntary guidelines.</li> <li>• Frequent surveys have found that BMP compliance rates are very high in all States, as is compliance with laws and regulations. Similarly, forest certification provides a clear means to demonstrate that private and public forestry organizations conform to the standards and guidelines for sustainable forest management.</li> <li>• Knowledge of Regional Conservation programs via the SFI Program.</li> <li>• State Endangered Species Protection Programs (Note: Arkansas does not have an endangered species act, but does maintain a list of Species of Special Concern, including fishes, Louisiana endangered species law, Mississippi Code. Title 49. Conservation and Ecology. Chapter 5. Fish, Game and Bird Protection and Refuges. Nongame and Endangered Species Conservation, MS Nongame and Endangered Species Conservation Act, Texas has separate laws to protect plants and animals. The law does not require recovery plans, critical habitat designation or agency consultation. In Texas, animal or plant species of conservation concern may be listed as threatened or endangered under the authority of state law and/or under the U.S. Endangered Species Act.</li> <li>• In all states sourced from, information about species of outstanding and exceptional value is requested from natural heritage databases and considered in management decisions.</li> </ul>

<p>Means of Verification</p>	<p><u>Lead Verifier:</u> <a href="#">Best Management Practices</a> for forestry established in each jurisdiction and monitored to achieve compliance to the Clean Water Act. The existence of acts like <a href="#">ESA</a> amongst a plethora of conservation efforts administered by well governed agencies. <a href="#">High levels of trained loggers</a> educated in these subjects present due to market requirements.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>SFI Evidence Matrix</b></li> <li>• <b>F&amp;W BMP Compliance Report, 2015</b></li> <li>• <a href="#">USDA National Report on Sustainable Forests—2010</a> Pg II-121</li> <li>• <a href="#">Habitat Conservation Plans, Annual Funding of Awards and Status Report</a></li> <li>• Agricultural and Forestry Extension Services</li> <li>• <a href="#">SFI and American Forest Foundation</a>, Conservation and Research Grants</li> <li>• <a href="#">The Endangered Species Protection Program</a>, State and Federal Versions</li> <li>• Examples of Federal Legislation and Programs: Forest Resource Development Program (FRDP), The Landowner Incentive Program (LIP), North American Wetland Conservation Act Grants (NAWCA),The Conservation Reserve Program (CRP),Environmental Quality Incentives Program (EQIP), , Healthy Forest Reserve, The Wetlands Reserve Program (WRP), The Wildlife Habitat Incentives Program (WHIP), The Army Compatible Use Buffer Program (ACUB), USFWS Safe Harbor program, Convention on Nature Protection and Resource Conservation and Recovery Act (RCRA) (1976, 1984), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, commonly known as "Superfund") (1980, 1986) and Migratory Bird Treaty Act (1918, 2006),</li> <li>• Examples of State Programs: The Mississippi Scenic Streams Stewardship Program (SSSP) and SGCN dependent on forest communities (See Appendices III, IV and V), The State Wildlife Grants Program (SWG),MISSISSIPPI'S FOREST LEGACY PROGRAM, The Mississippi Natural Heritage Program (MNHP),CHAPTER 4: EXISTING CONSERVATION PROGRAMS FOR FOREST RESOURCES, Mississippi Partners for Fish and Wildlife Program (MPFW), Mississippi Wildlife Heritage Fund, Mississippi Partners for Fish and Wildlife Program (MPFW).</li> <li>• Examples of treaties and conventions which the U.S. is a signatory: Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (Washington, DC, 1940), Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, Iran, 2 Feb 1971), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington DC, 1973), International Plant Protection Convention (IPPC) (1979 Revised Text) (Rome, Italy, 1979), Convention on the Conservation of Migratory Species of Wild Animals (Bonn, Germany, 23 Jun 1979)</li> <li>• Endangered species rankings by state: ex. Louisiana: <a href="http://www.wlf.louisiana.gov/wildlife/explanation-endangered-species-rankings">http://www.wlf.louisiana.gov/wildlife/explanation-endangered-species-rankings</a></li> <li>• <a href="#">HCP Annual Funding of Awards and Status Report</a></li> <li>• Natural Heritage Databases vis Nature Serve and direct from state agencies: ex. <a href="#">Texas</a></li> <li>• <a href="#">Logger training curriculums and stats by state report, SGSF</a></li> </ul>
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
<p>Risk Rating</p>	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
<p>Comment or Mitigation Measure</p>	<p>none</p>

**Indicator**

<p><b>2.2.5</b></p>	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that the process of residue removal minimises harm to ecosystems.</p>
<p>Finding</p>	<ul style="list-style-type: none"> <li>• DBI conducts a CWRA and <b>DDS</b> with annual review of effectiveness.</li> <li>• BMPs as they stand encourage the use and distribution of logging slash across sites for nutrient distribution and to prevent soil erosion. Biomass retention happens naturally due to this beneficial reuse of slash.</li> <li>• US protected areas database and wildlife action plans identify areas where special management plans are administered by the governing public agency which could include biomass retention guidelines. These areas have special protections which indicates proactive measures to protect ecosystems from harm.</li> <li>• Model biomass retention guidelines are available in some states while none currently exists in ABE's procurement region. Work is being completed to encourage the development of such guidelines. Although, a <a href="#">recent study completed on hardwood harvests</a> concluded with no change in BMP effectiveness between traditional clearcuts and biomass harvests:</li> <li>• Soil nutrients are maintained during biomass harvests awaiting further study according to the studies cited in this blog "<a href="#">Tree Harvesting and its Effect on Soil Nutrients</a>"</li> <li>• SFI Performance Measure 2.2 requires BMP Monitoring across the wood and fiber supply area.</li> <li>• Communication with SFI SICs about biomass harvesting guideline development</li> <li>• The US Protected Area Database contains information about protected lands that was published in April 2009</li> <li>• Technical Bulletin 966 (September, 2009) issued by the National Council for Air and Stream Improvement (NCASI) has reported high levels of compliance with water quality laws and BMP requirements across the U.S</li> </ul>
<p>Means of Verification</p>	<p>Lead Verifier: <a href="#">Federal and State owned lands</a> are set aside along with <a href="#">conservation easements on private property</a> to protect biodiversity. Programs created by legislation such as the <a href="#">Endangered Species Act</a> governed and enforced by public agencies. Market initiatives and conservation groups' support of biodiversity protection through research, projects, etc. <a href="#">High participation rates in sanctioned logger training programs</a> present due to market drivers.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>DBI BMP monitoring program</b></li> <li>• <b>SFI SIC communications</b></li> <li>• <a href="#">Stewardship Forest Program</a> and other forest landowner assistance programs as listed in 2.2.4</li> <li>• <a href="#">BMP manuals across the southern states</a></li> <li>• <a href="#">Pinchot Institute compendium of biomass harvesting research</a></li> <li>• <a href="#">Soil and Water Resources Conservation Act (RCA)</a></li> <li>• <a href="#">Clean Water Act</a></li> <li>• <a href="#">Web Soil Survey</a></li> <li>• <a href="#">USDA National Report on Sustainable Forests—2010</a> Pg II-121</li> <li>• Habitat Conservation Plans, <a href="#">Annual Funding of Awards and Status Report</a></li> <li>• Agricultural and Forestry Extension Services in each jurisdiction</li> <li>• <a href="#">SFI and American Forest Foundation</a>, Conservation and Research Grants</li> <li>• SI monitoring and productivity monitoring</li> <li>• <a href="#">State BMP Monitoring Reports</a></li> <li>• <a href="#">Protected Areas of the US</a></li> <li>• <a href="#">Forest</a> and <a href="#">Wildlife</a> Action Plans</li> <li>• <a href="#">Technical Bulletin 966 (September, 2009) issued by the National Council for Air and Stream Improvement (NCASI)</a></li> </ul>
<p>Evidence Reviewed</p>	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>



Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.2.6</b>	The Biomass Producer has implemented appropriate control systems and procedures to verify that negative impacts on ground water, surface water and water downstream from forest management are minimised (CPET S5b).
Finding	<ul style="list-style-type: none"> <li>All states that ABE procures from has agencies and regulatory programs to monitor and enforce environmental law.</li> <li><b>GWPA</b> requires conformance with their Sustainability Policy and implementation of BMPs.</li> <li>BMP's, and trained loggers all strongly insure that forest ecosystems are maintained and protected.</li> <li>Although there have been numerous studies directed at forestry practices and effects on water quality, only a subset have specifically reported on the effectiveness of BMPs. Most of these studies in the south-eastern United States have concluded that BMPs improve/maintain water quality,</li> <li>The development and widespread adoption of forestry BMPs to control silvicultural NPS activities is a well-documented example of how the CWA and state water quality agency programs have provided effective control of NPS pollution. All states with significant forestry activities have developed NPS control programs based on implementation of BMPs to minimize the potential for negative management impacts. Many states have conducted effectiveness monitoring and research to ensure that BMPs are achieving state water quality goals. BMPs are highly effective, widely implemented, and continually refined through the cooperative efforts of many stakeholders. When BMPs are widely implemented and effective, further progress toward meeting water quality criteria may be challenging.</li> <li>SFI Standard Objective 3 Protection and Maintenance of Water Resources Water quality</li> <li>SFI Performance Measure 2.2 requires BMP monitoring across the wood and fiber supply area.</li> <li>The SFI® 2015-2019 Fiber Sourcing Standard distinguishes itself from all other forest certification programs in that it requires the responsible procurement of fiber from non-certified forest lands.</li> <li>FSC® Principle 6: Environmental Impact</li> <li>ATFS™ Standard 4: Air, Water and Soil Protection</li> <li>BMP implementation rates, typically monitored by forestry commissions, are high in the region which substantiates that waste management is achieved on logging sites. Protected areas are identified by state and federal agencies which establishes even higher levels of sensitivity and enforcement of attributes such as waste management, BMPs and aesthetics.</li> <li>The NCASI study captures the positive attributes and successes of BMP implementation. Even though these elements are recorded and audited through third party certifications, these resources warrant being added as dedicated verifiers for this indicator.</li> <li>The US Protected Area Database contains information about protected lands that was published in April 2009</li> <li>Technical Bulletin 966 (September, 2009) issued by the National Council for Air and Stream Improvement (NCASI) has reported high levels of compliance with water quality laws and BMP requirements across the U.S</li> </ul>

Means of Verification	<p><u>Lead Verifier:</u> <a href="#">Best Management Practices</a> for forestry are established in each jurisdiction and monitored to achieve compliance to the <a href="#">Clean Water Act</a>. <a href="#">High participation rates in sanctioned logger training programs</a> present due to market drivers.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>F&amp;W BMP Compliance Report</b></li> <li>• <a href="#">NCASI BMP studies</a>, specifically <a href="#">PLC study</a></li> <li>• <a href="#">State BMP Monitoring Reports</a></li> <li>• <a href="#">Forest2Market bmp compliance blog</a></li> <li>• <a href="#">State Forestry</a> and <a href="#">Wildlife Action</a> Plans</li> <li>• The Clean Water Act, Clean Air Act, and Endangered Species Act</li> <li>• <a href="#">Protected Areas of the US</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.2.7</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that air quality is not adversely affected by forest management activities.
Finding	<ul style="list-style-type: none"> <li>• All states ABE sources from have environmental compliance and monitoring agencies with ample levels of enforcement.</li> <li>• CWRA: List of 156 Mandatory Class I Federal Areas include 2 areas in Arkansas and 1 area in Louisiana.</li> <li>• The Clean Air Act sets standards for air quality to protect public health and welfare. The Forest Service must ensure that its activities, or activities it permits, comply with these national standards and any State and local requirements for air pollution control. States develop State Implementation Plans (SIPs) describing how they will implement the requirements of the Clean Air Act. The Clean Air Act also charges the U. S. Forest Service as a Federal Land Manager of Class I areas, to protect air quality related values in the wilderness areas of a specified size.</li> <li>• <b>Gateway Purchase Agreement</b> Section 7 Compliance with Laws, Section 8 Forestry Practices</li> <li>• <b>Drax policies for dust control, air permits for mills and port</b></li> <li>• Market provision for biomass provides a reduction in forest fire risk and in return reduced prescribed burns to reduce fuel load.</li> <li>• Burn permits or licenced prescribed fire applicator is required in all states ABE procures biomass.</li> <li>• Smoke management guidelines provided by forestry commissions</li> <li>• <a href="#">Interagency Fire Prevention Strategy</a>: This strategy follows on the successes guided by the 2000 Southern Wildfire Prevention Strategy that focused on debris burning and homeowner safety in the wildland urban interface.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Public agencies enforce regulations that govern air quality and provide resources to mitigate risks.</p> <ul style="list-style-type: none"> <li>• Preamble citation</li> <li>• Intrinsic values of forest management</li> <li>• <a href="#">"Clean Air Act"</a></li> <li>• Dept of Environmental Quality in each jurisdiction (ex. <a href="#">MS</a>, <a href="#">AR</a>)</li> <li>• Smoke management guidelines governed by forestry commissions by jurisdiction</li> </ul>

## Focusing on sustainable sourcing solutions

	<ul style="list-style-type: none"> <li>• <a href="#">State Forest</a> and <a href="#">Wildlife</a> Action Plans</li> <li>• <a href="#">Interagency Fire Prevention Strategy</a></li> <li>• <a href="#">DBI Environmental Permits</a></li> <li>• <a href="#">LA Burn Permit, MS Burn Permit, AR Burn Permit</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.2.8</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is controlled and appropriate use of chemicals, and that Integrated Pest Management (IPM) is implemented wherever possible in forest management activities (CPET S5c).
Finding	<ul style="list-style-type: none"> <li>• SFI Indicator 2.2.4: The World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is available.</li> <li>• SFI Indicator 2.2.5: Use of pesticides banned under the Stockholm Convention on Persistent Organic Pollutants (2001) shall be prohibited.</li> <li>• State-level BMPs typically restrict application to nonriparian zones.</li> <li>• The use of class 1A and 1B pesticides, as drafted by the World Health Organisation, and of chlorinated hydrocarbons are not used in ABE's procurement area.</li> <li>• State Applicator License Programs present in each jurisdiction</li> <li>• Chemical use in forest stands, whether for insect control or for vegetation management, is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The US Environmental Protection Agency (EPA) has responsibility for implementing and enforcing FIFRA. All forest-use chemicals must be EPA-registered and forest land operators must follow application guidelines prescribed for each chemical.</li> </ul>
Means of Verification	<p>Leading Verifier: Public agencies govern these elements. Agencies offer educational services and require licensing. Inherit benefits of thinning encouraged by biomass markets.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">NRCS, Integrated Pest Management Conservation Practice Std</a></li> <li>• <a href="#">USDA, Risk Assessment WS for Pesticides</a></li> <li>• <a href="#">BMPs by State Listing</a></li> <li>• Federal and State Depts of Environmental Quality</li> <li>• <a href="#">Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)</a></li> <li>• Pesticide Applicator Training, Licensing and regulations by jurisdiction</li> <li>• <a href="#">Noxious Weed Grant Programs</a></li> <li>• Pesticide Applicator Training present in each jurisdiction (ex. <a href="#">MS Pesticide Applicator Training</a>)</li> <li>• Weed and Pest Control Licensing (ex. <a href="#">MS Weed and Pest Control Licensing, LA Pesticide Licensing and Certs, AR Commercial Applicator for Pesticides</a>)</li> <li>• <a href="#">LA Herbicide Restrictions</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>

## Focusing on sustainable sourcing solutions

Comment or Mitigation Measure	none
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	Indicator
<b>2.2.9</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that methods of waste disposal minimise negative impacts on forest ecosystems (CPET S5d).
Finding	<ul style="list-style-type: none"> <li>• Solid Waste Disposal Act of 1986: Persons or organizations violating compliance orders for management of hazardous wastes subject to civil and criminal penalties ranging from maximums of \$25,000 to \$1,000,000 and from 2 to 15 years imprisonment.</li> <li>• <b>GWPA</b> obligates suppliers to follow all applicable laws</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Public agencies govern compliance of these elements. <a href="#">Best Management Practices</a> for forestry are established by jurisdiction and monitored to achieve compliance to the <a href="#">Clean Water Act</a>. <a href="#">High levels of trained loggers</a> are present due to market requirements.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">Solid Waste Disposal Act</a></li> <li>• <a href="#">Resource Conservation and Recovery Act of 1976 (RCRA)</a></li> <li>• Depts of Environmental Quality by jurisdiction</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.3.1</b>	Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.
Finding	<ul style="list-style-type: none"> <li>• Plethora of research, studies and reports overwhelmingly determines that forest management is driven by markets and with measured demand and due diligence then forests flourish.</li> <li>• Forest Inventory Program: The Forest Inventory and Analysis (FIA) Program of the U.S. Forest Service provides the information needed to assess America's forests.</li> <li>• FIA data over the period from 2009 to 2012 for net volume of live trees across the 10 state area shows volumes increasing on existing forest lands. In addition, much of the shift from pastureland or rangeland to forest use is due to reclassification over time. Historic and projected growth drain of catchment is positive.</li> <li>• Provision of biomass market inherently provides capabilities for forest landowners to conduct additional stand treatments therefore improving fiber production.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Public agencies are funded through legislation to measure, analyze, and publically report trends and data concerning these elements. Forest inventory data and growth data are publically available to for all stakeholders to analyze.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">FIA Data (including MS Institute for Forest Inv Reports)</a> and <a href="#">Timber Production Output Reports</a>, USDA</li> <li>• <a href="#">State Forest Fact Sheets</a> (Ex. <a href="#">Mississippi</a>)</li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Southern Forest Future Project</a></li> <li>• <b>F&amp;W BMP Compliance Report</b></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.3.2</b>	Adequate training is provided for all personnel, including employees and contractors (CPET S6d).
Finding	<ul style="list-style-type: none"> <li>• DBI has written <b>procedures</b> that explicitly requires periodic training. Training for all relevant staff is planned and delivered as required.</li> <li>• The VP Sustainability has overall responsibility for FSC/PEFC/SFI training, with Site Managers, and Heads of Teams delivering training as appropriate.</li> <li>• DBI CoC Manual Section I.F. This document has been updated to incorporate SBP requirements.</li> <li>• The <b>GWPA</b> requires all suppliers to provide training to their staff.</li> <li>• The SFM standards all require periodic training to remain Chain of Custody certified. SFI® also requires logger training. State-level SFI committees, including those in Arkansas, Louisiana, Mississippi, and Texas, offer logger training on an annual basis.</li> </ul>
Means of Verification	<u>Lead Verifier: <b>Credentialing and training programs</b> exist for all professionals in the supply chain by jurisdiction and/or by employer.</u> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">Logger Training Report</a></li> <li>• State and Professional Credential Boards (i.e. Foresters-RFs by State and SAF CFs, Logger-State Level, etc)</li> <li>• <a href="#">Drax Investment in Employees</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.3.3</b>	Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy, including employment.
Finding	<ul style="list-style-type: none"> <li>• Drax Biomass supports local economic development through contributions to charitable causes and participation in civic organizations. In 2015, both facilities made generous donations to education-related initiatives. The Gloster-based facility donated \$10,000 to</li> </ul>

	<p>the Margaret Porter Troupe Arts Project, a summer camp dedicated to teaching children the basics of poetry, painting, theatre and music. Similarly, the Beekman-based facility donated \$9,000 to fund infrastructure improvements at Beekman Charter School, a new neighborhood school designed to provide students with an academically and socially enriching experience. Both facilities also made contributions to other local causes, including public libraries, community events and recreational facilities.</p> <ul style="list-style-type: none"> <li>• To further development of the next generation, DBI also conducts a paid internship program for college students.</li> <li>• Apart from charitable contributions, employees are also active in a range of civic organizations, including local chambers of commerce and development corporations. In Beekman, the plant manager sits on the Board of the Morehouse Economic Development Council, a leading voice in the region for reinvestment and growth. Collectively, these efforts demonstrate DBI's commitment to being a strong and visible partner in the effort to improve community well-being and economic development. Lastly, employees participate in Federal and State-level forestry associations to educate landowners on the economic and environmental benefits of biomass energy, and promote further adoption of sustainable forest management practices.</li> <li>• DBI plants were built in areas with abundant forest resources that had lost markets or resided in waning and/or spot markets. Talented and knowledgeable employees resided in these areas and skills are now being utilized.</li> <li>• <b>State and local economic incentives</b> granted to attract investment and jobs.</li> <li>• DBI employs primarily individuals from the local communities based on <b>human resources and payroll records</b>.</li> <li>• Provision of biomass market inherently provides capabilities for forests landowner's additional stand treatments therefore improving fiber production.</li> <li>• Mississippi State University and similar institutions in the procurement region keep score of the positive economic impact the forest industry as a whole has on the state.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Location of pellet plants and infrastructure improves local economies, provides exponential effects and contributes to employment.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• Human resources records</li> <li>• <a href="#">Amite County, MS Forestry Economic Impact Profile</a></li> <li>• <a href="#">Morehouse Parish, LA Economic Profiles</a></li> <li>• <a href="#">Pellet Plants Spur New Life in Rural South</a>, 2015 World Biomass</li> <li>• <a href="#">Wood Pellet Co-Firing for Electric Generation Source of Income for Forest Based Low Income Communities in Alabama</a></li> <li>• <a href="#">Forest landowner associations support of biomass</a></li> <li>• <a href="#">An assessment of nonindustrial private forest landowner willingness to harvest woody biomass in support of bioenergy production in Mississippi: A contingent rating approach.</a> Steven R. Gruchya, Donald L. Grebnerb, Ian A. Munnb, Omkar Joshib, Anwar Hussainc</li> <li>• <a href="#">Decline in pulp and paper. Effects on backward linked forest industries and local economies.</a> Forest Product Journal, USDA</li> <li>• <a href="#">Drax Community Involvement</a></li> <li>• <a href="#">DBI News</a></li> <li>• State level forestry economics (ex. MS)</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
Comment or Mitigation Measure	<p>none</p>

	Indicator
2.4.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that the health, vitality and other services provided by forest ecosystems are maintained or improved (CPET S7a).
Finding	<ul style="list-style-type: none"> <li>• Demonstration of resilient forests. Forests must remain as forests. Providing a market grants the landowner forest management tools to maintain healthy forests of value all the while providing ecosystem services for society.</li> <li>• Southern Forests Future Project states: “No single dominant force of change will affect the forests of the South. Rather, a combination of socioeconomic and biophysical factors will reshape the forests of the South and their interaction may well amplify the direct effects. Forest futures will most strongly depend on combinations and interactions of the effects of four key factors: population growth, climate change, fiber markets, and invasive insect, disease, and plant species.”</li> <li>• Several Federal programs provide incentives for conservation of forestlands and maintaining sustainable forest management practices. Summarized in table 11.1 of the CWRA.</li> <li>• State programs—it is the States, however, that most directly address provision of ecosystem services. Educational and technical assistance for management of wildlife habitat or riparian areas, water quality, resource conservation, and protection from invasive species generally is available in all States, through their forestry, wildlife, and cooperative extension personnel. Tax abatement programs and credits encourage forest management in MS, AR and LA.</li> <li>• Each state has a forestry agency, department, or division whose collective responsibilities include providing services and outreach, land management, and forest practices oversight. I.e. Habitat Conservation Plans, Conservation Easements, etc</li> <li>• State Laws and Policies may also include: Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural communities conservation acts</li> <li>• Privately sponsored programs available in the Southern States include State Tree Farm programs coordinated by the American Forest Foundation (American Tree Farm System Web site 2011) and the Longleaf Restoration Program sponsored by The Longleaf Alliance</li> <li>• BMP Implementation Rates are high in ABE’s catchment.</li> <li>• Logger Training is required of all suppliers via the obligatory requirements of the <b>GWPA</b>.</li> <li>• <b>DBI Procurement and Sustainability staff</b> boasts a multitude of experienced foresters supported by many <b>forms of credentials</b>. Some states in ABE’s catchment require forester registrations.</li> <li>• Example of state level protections and their effectiveness presented in the “Bioassessment of Silviculture Best Management Practices in Arkansas” publication.</li> </ul>
Means of Verification	<p>Lead Verifier: <a href="#">Best Management Practices</a> for forestry are established in each jurisdiction and monitored to achieve compliance to the <a href="#">Clean Water Act</a>. <a href="#">Sanctioned logger training programs</a> are present and participated in market wide that educate supply chain about these elements. Public agencies administer a plethora of programs and enforce conservation laws that protect and support these elements.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">The Southern Forest Futures Project, USDA</a></li> <li>• <a href="#">The Environmental Quality Incentives Program (EQIP)</a>, <a href="#">The Forest Land Enhancement Program</a>, <a href="#">Habitat Conservations Plans</a></li> <li>• <b>DBI Staff Credentials</b></li> </ul>

	<ul style="list-style-type: none"> <li>State and Professional Credential Boards (i.e. Foresters-RFs by State, SAF CFs, Assoc of Consulting Foresters, Logger-State Level, Wildlife Biologists, etc)</li> <li>Forestry Commissions and/or Extension Services (i.e. implement local wildfire control)</li> <li><a href="#">Forestry BMP Implementation Reports</a></li> <li>Privately sponsored programs such as the <a href="#">Longleaf Restoration Program sponsored by The Longleaf Alliance</a></li> <li>Property Tax Abatement Programs to encourage forest management present in each jurisdiction</li> <li>Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural communities conservation acts, etc.</li> <li>Stakeholder Consultation</li> <li><a href="#">State Forest</a> and <a href="#">Wildlife Action</a> Plans</li> <li><a href="#">Bioassessment of Silviculture Best Management Practices in Arkansas</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.4.2</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that natural processes, such as fires, pests and diseases are managed appropriately (CPET S7b).
Finding	<ul style="list-style-type: none"> <li>Market provision for biomass provides a reduction in forest fire risk and in return reduced uncontrolled wildfires occur. In turn, less prescribed burns are needed to reduce fuel load.</li> <li>Enforcement actions in each state ABE sources from demonstrates effective application of law to protect species and ecosystems of concern.</li> <li>Burn permits or licenced prescribed fire licensing is required in all states ABE procures biomass.</li> <li>Smoke management guidelines provided by forestry commissions.</li> <li><a href="#">Interagency Fire Prevention Strategy</a>: This strategy follows on the successes guided by the 2000 Southern Wildfire Prevention Strategy that focused on debris burning and homeowner safety in the wildland urban interface.</li> <li>NRCS IMP: Forest management standard and assistance to implement integrated pest management plan into land management objectives.</li> <li>Each state has a forestry agency, department, or division whose collective responsibilities include providing services and outreach, land management, and forest practices oversight. These were reviewed for the States listed above as well as their employment and environmental/natural resources departments.</li> <li>State Laws and Policies may also include: Forest practices acts, Endangered species acts, Environmental quality act, Wildlife laws, Water quality protection laws, Water resources laws, Land use laws, Cultural protection acts, Business practices laws, Fire practices laws, River compacts and wild and scenic rivers acts, Natural communities conservation acts</li> <li>Drax Sustainability Policy states "Not adversely affect protected or vulnerable biodiversity and where possible we will give preference to biomass production that strengthens biodiversity."</li> </ul>



	<ul style="list-style-type: none"> <li>• Drax Environmental Policy States "Staff are encouraged to identify areas where environmental improvements may be made, either to on-site impacts or to those caused by our procurement or by our suppliers."</li> <li>• DBI's Commitment to Sustainable Forestry states that "DBI's Sustainable Forestry Policy is to promote the Principles of Sustainable Forest Management including: ...protecting special sites and biological diversity..."</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Market provision for biomass provides a reduction in forest fire risk. Well governed public agencies and programs exist to support landowners in the management of these elements.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• See 2.2.8; Chemical Applicator and BMP Info</li> <li>• State jurisdiction burn permits and smoke guidelines</li> <li>• <a href="#">State Forest</a> and <a href="#">Wildlife Action</a> Plans</li> <li>• <a href="#">Interagency Fire Prevention Strategy, 2000 Southern Wildfire Prevention Strategy</a></li> <li>• <a href="#">State of America's Forest Report, SAF</a></li> <li>• <a href="#">Southern Forest Futures Report, USDA</a></li> <li>• Regulations, agencies, programs and enforcement usually administered by a state forestry commission or agriculture dept. Most governed by a state forester.</li> <li>• <a href="#">Protected areas of the US</a></li> <li>• <a href="#">FIA Forest Inventories</a></li> <li>• <a href="#">NRCS Integrated Pest Management program</a></li> <li>• <a href="#">State Forest Fact Sheets</a></li> <li>• State burn permits (ex. <a href="#">LA Burn Permit, MS Burn Permit, AR Burn Permit</a>)</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.4.3</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that there is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment (CPETS7c).
Finding	<ul style="list-style-type: none"> <li>• Enforcement actions in each state sourced from demonstrates effective application of law to protect landowners from illegal logging, unpermitted mining and encroachment. Occurrences of timber theft and encroachment are not systemic in the states from which ABE sources. Pathways for recourse exists in each state to remedy the problem. Also see 1.3.1</li> <li>• Review of Federal Laws about Timber Theft bans commerce in all illegally sourced forest products whether harvested overseas or within the United States.</li> <li>• All states from which ABE sources fiber has timber theft laws that carry civil and criminal penalties.</li> <li>• Drax Sustainability Policy states "Our policy is designed to ensure that we can verify that the biomass consumed in our generation facilities has been legally produced and is environmentally sustainable. We will comply, as a minimum, with the sustainability requirements being introduced by the UK Government."</li> <li>• DBI's Commitment to Sustainable Forestry states "DBI's Sustainable Forestry Policy is to promote the Principles of Sustainable Forest Management including: ...complying with</li> </ul>

	<p>legal requirements ", "DBI is committed to comply with applicable federal, state and local laws and regulations..." and "DBI is committed to implement its best efforts to avoid trading and sourcing wood from the following categories: a) Illegally harvested wood"</p> <ul style="list-style-type: none"> <li>• <b>DDS</b>, CWRA and the draft US NRA find legality to be of "Low Risk" in ABE's procurement region. See the <a href="#">global forest registry</a> for additional evidence.</li> <li>• In the EU, the organization that places material/products on the EU market "for the first time" must apply a <b>DDS</b>, and other supply chain actors need to maintain records so that the original supplier can be identified.</li> <li>• <b>GWPA</b> requires legal compliance, and its ongoing supplier monitoring system ensure that illegal logging is of negligible impact to the company.</li> <li>• AHEC Report on Timber Trespass concludes that illegal logging is negligible in the US.</li> <li>• <a href="#">Environmental Investigation Agency</a>: The website's only references to the United States are in reference to U.S.-based companies operating in other countries and regarding the Lacey Act.</li> <li>• State SICs regularly review and investigate complaints received via their inconsistent practices procedure.</li> <li>• Each jurisdiction has its own version of legislation governing mining but the federal government has oversight.</li> <li>• Each jurisdiction has its own version of legislation governing land encroachment.</li> <li>• Each jurisdiction has its own version of legislation governing illegal logging and land use rights.</li> </ul>																				
<p>Means of Verification</p>	<p><u>Lead Verifier</u>: Each jurisdiction has well governed agencies that enforce these elements with civil and criminal penalties.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>Transactional system records (Severance Tax)</b></li> <li>• See 1.3.1 Citations</li> </ul> <table border="1" data-bbox="331 1137 1439 1608"> <thead> <tr> <th>Texas</th> <th>Mississippi</th> <th>Louisiana</th> <th>Arkansas</th> <th>Federal</th> </tr> </thead> <tbody> <tr> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">State Timber Theft Law</a></td> <td><a href="#">US: Lacey Act</a></td> </tr> <tr> <td><a href="#">Publication explaining timber theft law.</a></td> <td><a href="#">Annual report presenting enforcement action stats</a></td> <td><a href="#">Timber theft cases and litigation discloser via search engine.</a></td> <td><a href="#">Annual reports presenting enforcement action stats.</a></td> <td><a href="#">Enforcement Action: Article summarizing recent cases.</a></td> </tr> <tr> <td><a href="#">Enforcement action example.</a></td> <td><a href="#">Article presenting enforcement action stats for past two years.</a></td> <td></td> <td></td> <td>Third party review of effectiveness of laws: <a href="#">Environmental Investigation Agency</a></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• <a href="#">Mining agencies.</a></li> <li>• <a href="#">U.S. Code: Title 30 - MINERAL LANDS AND MINING</a></li> <li>• <a href="#">Annual reports presenting mine permitting and oversight inspections of mining.</a></li> <li>• <a href="#">Land encroachment legislation.</a></li> <li>• <a href="#">State Forest and Wildlife Action Plans</a></li> <li>• <a href="#">Declaration on the Rights of Indigenous Peoples</a></li> <li>• <a href="#">Announcement of U.S Support for the United Nations Declaration on the Rights of Indigenous Peoples</a></li> <li>• <a href="#">Logger Training Report</a></li> <li>• <a href="#">A Nationwide Survey of Timber Trespass Legislation. Hicks, Timothy. Master of Forestry Thesis March 2005 PSU School of Forest Resources</a></li> <li>• <a href="#">Assessment of Lawful Harvesting and Sustainability of US Hardwood Exports, AHEC Illegal Logging Portal</a></li> <li>• <a href="#">"Illegal" Logging and Global Wood Markets, Seneca Creek Assoc and WRI</a></li> </ul>	Texas	Mississippi	Louisiana	Arkansas	Federal	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">State Timber Theft Law</a>	<a href="#">US: Lacey Act</a>	<a href="#">Publication explaining timber theft law.</a>	<a href="#">Annual report presenting enforcement action stats</a>	<a href="#">Timber theft cases and litigation discloser via search engine.</a>	<a href="#">Annual reports presenting enforcement action stats.</a>	<a href="#">Enforcement Action: Article summarizing recent cases.</a>	<a href="#">Enforcement action example.</a>	<a href="#">Article presenting enforcement action stats for past two years.</a>			Third party review of effectiveness of laws: <a href="#">Environmental Investigation Agency</a>
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	<ul style="list-style-type: none"> <li>• <a href="#">State Forestry Laws. Defenders of Wildlife, October 2000</a></li> <li>• SFI State Implementation Committees Inconsistent Practices Policies, <a href="#">Example</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.5.1</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that legal, customary and traditional tenure and use rights of indigenous people and local communities related to the forest are identified, documented and respected (CPET S9).
Finding	<ul style="list-style-type: none"> <li>• Strong support mechanisms via public/private partnerships and protection provided by strong legislation are in place to uphold the rights of identified indigenous people, minorities and local communities.</li> <li>• State of America’s Forest, SAF Figure 4 and 13 displaying distribution of landownership showing stable patterns between public and private ownerships.</li> <li>• Today, federal, state, and local governments regulate growth and development through statutory law. The majority of controls on land, however, stem from the actions of private developers and individuals.</li> <li>• Two major federal laws have been passed in the last half century that limit the use of land significantly. These are the National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).</li> <li>• <a href="#">Forest-Use Land. Forest-use land in 2007 includes 127 million acres of grazed forests, but excludes an estimated 80 million forest acres in parks, wildlife areas, and other special uses. Forest-use land increased 20 million acres (3 percent) from 2002 to 2007, continuing a trend that became evident in 2002 and reversing an almost 50-year downward trend. The 14-percent decline in forest-use land between 1949 and 2002 was largely due to forest-use land reclassified to special-use areas. Economic Research Service, 2007<sup>2</sup>.</a></li> <li>• Note the list of Federal Acts in the CWRA</li> <li>• “The legal system in the United States is generally considered fair and efficient in resolving conflicts pertaining to traditional rights including use rights, cultural interests or traditional cultural identity. There are different mechanisms or processes that allow Native American tribes, as well as any private citizen, to deal with disagreement and conflict related to decisions affecting natural resources, and forests in particular that are considered to be equitable.”</li> <li>• Title Issues and Ownership Disputes prevalent in minority communities: In partnership with USDA's Natural Resources Conservation Service and Forest Service, the U.S. Endowment for Forestry and Communities recently launched an initiative to increase profitability and asset value of African American-owned forestland in order to help stem the tragic history of African American land loss.</li> <li>• The United States openly supports the United Nations’ Declaration on the Rights of Indigenous Peoples initiative.</li> </ul>

<sup>2</sup> Major Uses of Land in the United States, Economic Research Service, 2007

Means of Verification	<p><u>Lead Verifier:</u> Each jurisdiction has statutory law that governs these elements. Ample case law is present demonstrating path of recourse exists for all parties. Each jurisdiction with well governed agencies enforce these elements that carry civil and criminal penalties and administer land use monitoring programs.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">State of America's Forest Report, SAF</a></li> <li>• Stakeholder Consultation</li> <li>• <a href="#">Major Uses of Land in the US, 2007, Economic Research Service</a></li> <li>• <a href="#">Forestry and African American Land Retention, US Endowment for Forestry and Communities</a></li> <li>• <a href="#">Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples</a></li> <li>• <a href="#">National Historic Preservation Act of 1966</a> (today embodied in 16 U.S.C. 461 et seq.)</li> <li>• <a href="#">National Environmental Policy Act of 1969</a> (42 U.S.C. 4321 et seq.)</li> <li>• Economic Research Service Reports, <a href="#">Example</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.5.2</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.
Finding	<ul style="list-style-type: none"> <li>• No food related feedstock used. No sustenance living on large scale in US.</li> <li>• Irrigation is not used for forestry operations in region due to abundant water resources.</li> <li>• No land use change on landscape level since 1950s</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Sustenance living levels in limited or regionalized cases supported by well governed public agencies. Abundant water resources in procurement region not limiting factor for tree growth and feedstock not utilized as food stuff. Landscape land use levels monitored.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• Stakeholder Consultation</li> <li>• <a href="#">Dept of Interior, Federal Subsistence Management Program</a></li> <li>• <a href="#">Average annual rainfall by state</a></li> <li>• <a href="#">FIA data and supplemental reports and analysis</a></li> <li>• <a href="#">State of America's Forest, SAF</a></li> <li>• <a href="#">ERS Report</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	<b>none</b>

	Indicator
2.6.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.
2.7.1	The Biomass Producer has implemented appropriate control systems and procedures for verifying that Freedom of Association and the effective recognition of the right to collective bargaining are respected.
Finding	<ul style="list-style-type: none"> <li>• The US Department of Labor implements and enforces US labor law.</li> <li>• The Fair Labor Standards Act (FLSA) establishes minimum wage, overtime pay, recordkeeping, and child labor standards affecting full-time and part-time workers in the private sector and in federal, state, and local governments.</li> <li>• Two major federal laws have been passed in the last half century that limit the use of land significantly. These are the National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.) and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).</li> <li>• <u>Forest-Use Land. Forest-use land in 2007 includes 127 million acres of grazed forests, but excludes an estimated 80 million forest acres in parks, wildlife areas, and other special uses. Forest-use land increased 20 million acres (3 percent) from 2002 to 2007, continuing a trend that became evident in 2002 and reversing an almost 50-year downward trend. The 14-percent decline in forest-use land between 1949 and 2002 was largely due to forest-use land reclassified to special-use areas. Economic Research Service.</u></li> <li>• Federal Law regarding forestry dictate that: Forest fire fighting and forest fire prevention occupations, timber tract occupations, forestry service occupations, logging occupations, and occupations in the operation of any sawmill, lathe mill, shingle mill, or cooperage stock mill abide by (Order 4). [75 FR 28453, May 20, 2010]</li> <li>• <u>OSHA eTool: This eTool outlines the required and recommended work practices that may reduce logging hazards. Workers have a right to a safe workplace. The law requires employers to provide their employees with working conditions that are free of known dangers. The OSHA law also prohibits employers from retaliating against employees for exercising their rights under the law (including the right to raise a health and safety concern or report an injury). For more information see <a href="http://www.whistleblowers.gov">www.whistleblowers.gov</a> or worker rights.</u></li> <li>• AHEC reports that: “Forest employment in the US is regulated under federal and state laws and codes, which prohibit child labor and are consistent with the ILO Fundamental Principles and Rights at work.”</li> <li>• ITUC and IOE: The US and some employers have direct complaints cited but none are related to forestry or the forest industry.</li> <li>• All employees in the US are allowed to unionize and gather for collective bargaining. Unions exist all across the US and have for quite some time signifying their ability to operate lawfully.</li> <li>• The National Labor Relations Act protects workers’ right not only to form and join labor organizations and bargain collectively, but also “to engage in other concerted activities for the purpose of collective bargaining or mutual aid or protection.” The United States Supreme Court has deemed strikes to be among the concerted activities protected.</li> <li>• <b>DBI procedures</b> obligates that all suppliers undergo a “Know Your Vendor” procedure to ensure and to assess any violations of the law or concerning publicity.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Statutory labor and employment law and regulations exist and persist with the enforcement of employment, labor, health and safety law. <b>Risk management of business operations</b> inherently drives compliance. Related <b>management systems, internal processes</b> and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Employment Law Poster</a></li> <li>• <a href="#">Forestry BMP Implementation Reports</a></li> <li>• Stakeholder Consultation</li> <li>• <a href="#">Employment and Labor Law</a></li> <li>• <a href="#">National Historic Preservation Act of 1966 (today embodied in 16 U.S.C. 461 et seq.)</a></li> <li>• <a href="#">National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)</a></li> <li>• <a href="#">OSHA Forest Industry Regulations</a></li> <li>• <a href="#">AHEC Legality Report</a></li> <li>• <a href="#">ERS Report</a></li> <li>• <a href="#">The National Labor Relations Act</a></li> <li>• Survey of violations of trade union rights by the <a href="#">International Trade Union Congress ITUC</a></li> <li>• Ratification of ILO conventions and their monitoring of non-compliance by the ILO, see the <a href="#">ILO NORMLEX database</a>.</li> <li>• SFI State Implementation Committee Inconsistent Practices Policies</li> <li>• <a href="#">Equal Opportunity Employment Act</a></li> <li>• <a href="#">The National Labor Relations Act</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.7.2</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using any form of compulsory labour.
<b>2.7.3</b>	The Biomass Producer has implemented appropriate control systems and procedures to verify that feedstock is not supplied using child labour.
Finding	<ul style="list-style-type: none"> <li>• Sufficient laws and consequences exist in the US to deter forced and child labor from occurring.</li> <li>• According to the 2010 U.S. Department of Labor's List of Goods Produced by Child or Forced Labor, forced labor has been identified in the harvesting and production of timber in Brazil, Peru, and Myanmar (Burma).</li> <li>• 18 U.S. Code § 1589 - Forced labor: Whoever knowingly provides or obtain labor by force in the US is subject to be fined under this title, imprisoned not more than 20 years, or both.</li> <li>• <b>DBI procedures</b> obligates that all suppliers undergo a "Know Your Vendor" procedure to ensure assess any violations of the law or concerning publicity.</li> <li>• The Fair Labor Standards Act (FLSA) sets wage, hours worked, and safety requirements for minors (individuals under age 18) working in jobs covered by the statute. The rules vary depending upon the particular age of the minor and the particular job involved. As a general rule, the FLSA sets 14 years of age as the minimum age for employment, and limits the number of hours worked by minors under the age of 16. FLSA generally prohibits the employment of a minor in work declared hazardous by the Secretary of Labor (for example, work involving excavation, driving, and the operation of many types of power-driven equipment). The FLSA contains a number of requirements that apply only to particular types of jobs (for example, agricultural work or the operation of motor vehicles) and many exceptions to the general rules (for example, work by a minor for his or her parents).</li> </ul>

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	<ul style="list-style-type: none"> <li>Each state also has its own laws relating to employment, including the employment of minors. If state law and the FLSA overlap, the law which is more protective of the minor will apply.</li> <li><u>There is no evidence of child labor or violation of ILO Fundamental Principles and Rights at work taking place in forest areas in the district concerned and PEFC a) not complying with local, national or international legislation. No evidence of child labor or violation of ILO fundamental principles on a remarkable scale is known to occur. Global Child labor trends 2000 to 2004. ILO (International Labour Office). <a href="http://www.ilo.org/ipecinfor/product/viewProduct.do?productId=2299">http://www.ilo.org/ipecinfor/product/viewProduct.do?productId=2299</a>. Note that the United States is a member of the ILO but has not yet ratified the ILO Declaration on Fundamental Principles and Rights at Work.</u></li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Statutory labor and employment laws and regulations are protective of employees' rights, health and safety. Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li><u>Employment Law Poster</u></li> <li><u>18 U.S. Code § 1589 - Forced labor</u></li> <li>Internal and external sustainability audits</li> <li>Stakeholder Consultation</li> <li>Federal Labor Laws</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.7.4</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.
Finding	<ul style="list-style-type: none"> <li>Strong and effective legislation exists to prevent discrimination.</li> <li>The Age Discrimination in Employment Act (ADEA): prohibits employers from discriminating on the basis of age.</li> <li>Title VII of the Civil Rights Act of 1964: prohibits discrimination based on race, color, religion, sex or national origin</li> <li>The Pregnancy Discrimination Act: specifying that unlawful sex discrimination includes discrimination based on pregnancy, childbirth, and related medical conditions</li> <li>The Family and Medical Leave Act: sets requirements governing leave for pregnancy and pregnancy-related conditions</li> <li>The Rehabilitation Act of 1973: prohibits employment discrimination on the basis of disability</li> <li>The Bankruptcy Reform Act of 1978: prohibits employment discrimination on the basis of bankruptcy or bad debts.</li> <li>The Immigration Reform and Control Act of 1986: prohibits employers with more than three employees from discriminating against anyone (except an unauthorized immigrant) on the basis of national origin or citizenship status.</li> </ul>

	<ul style="list-style-type: none"> <li>The Americans with Disabilities Act of 1990 (ADA): enacted to eliminate discriminatory barriers against qualified individuals with disabilities, individuals with a record of a disability, or individuals who are regarded as having a disability.</li> <li>The Age Discrimination in Employment Act of 1967 (ADEA): This law protects people who are 40 or older from discrimination because of age.</li> <li>Note that AR, LA, MS, and TX do not have anti-discrimination laws in place.</li> <li><b>DBI employee handbook</b> has EEO policies in place: EEO and Non-discrimination Statement, Anti-harassment Guidelines, Reasonable Accommodation</li> <li><b>DDS</b> reviewed the ILO: The US has not ratified all of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.</li> </ul>
Means of Verification	<p><u>Lead Verifier:</u> Statutory labor and employment laws and regulations are protective of employees' rights, health and safety. Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>Preamble citations</li> <li><a href="#">Employment Law Poster</a></li> <li><b>Human Resources manuals</b></li> <li>Federal Laws applicable to Labour</li> <li>Monitoring of non-compliance by the ILO, see the ILO <a href="#">NORMLEX database</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.7.5</b>	The Biomass Producer has implemented appropriate control systems and procedures for verifying that feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.
Finding	<ul style="list-style-type: none"> <li>The Fair Labor Standards Act (FLSA) sets wage, hours worked, and safety requirements for minors (individuals under age 18) working in jobs covered by the statute. The rules vary depending upon the particular age of the minor and the particular job involved. As a general rule, the FLSA sets 14 years of age as the minimum age for employment, and limits the number of hours worked by minors under the age of 16. FLSA generally prohibits the employment of a minor in work declared hazardous by the Secretary of Labor (for example, work involving excavation, driving, and the operation of many types of power-driven equipment).</li> <li>Each state also has its own laws relating to employment, including the employment of minors. If state law and the FLSA overlap, the law which is more protective of the minor will apply.</li> <li>The Equal Pay Act amended the Fair Labor Standards Act in 1963. The Equal Pay Act prohibits employers and unions from paying different wages based on sex.</li> <li><b>GWPA:</b> Signatories must abide by all laws or be in breach.</li> <li>ITUC and IOE: The US and some employers have direct complaints cited but none are related to forestry or the forest industry</li> <li>The US has not ratified all of the core ILO labor standards, however; there is sufficient evidence to suggest that the US does not violate key principles.</li> </ul>



Means of Verification	<p><u>Lead Verifier</u>: Statutory labor and employment laws and regulations are protective of employees' rights, health and safety. Risk management of business operations inherently drives compliance. Related management systems, internal processes and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <a href="#">Employment Law Poster</a></li> <li>• Stakeholder Consultation</li> <li>• <a href="#">International Trade Union Congress ITUC</a></li> <li>• <a href="#">ILO labor standards</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	<b>none</b>

	Indicator
<b>2.8.1</b>	<p>The Biomass Producer has implemented appropriate control systems and procedures for verifying that appropriate safeguards are put in place to protect the health and safety of forest workers (CPET S12).</p>
Finding	<ul style="list-style-type: none"> <li>• The United States has in place Federal legislation regulating employers' responsibilities for worker health and safety – Occupational Safety and Health Act (OSHA) of 1970. Within this Act there are logging-specific regulations: OSHA 1910.266</li> <li>• <a href="#">OSHA eTool: This eTool outlines the required and recommended work practices that may reduce logging hazards. Workers have a right to a safe workplace. The law requires employers to provide their employees with working conditions that are free of known dangers. The OSHA law also prohibits employers from retaliating against employees for exercising their rights under the law (including the right to raise a health and safety concern or report an injury). For more information see <a href="http://www.whistleblowers.gov">www.whistleblowers.gov</a> or <a href="#">worker rights</a>.</a></li> <li>• In addition, each of the States that ABE operates in have additional departments, legislation, and regulation regarding worker safety and health: Louisiana Workforce Commission, Texas Workforce Commission (TWC), MS Dept of Employment Security (defers to OSHA) and the Arkansas Dept of Labor.</li> <li>• <a href="#">Thirty-four states have some type of program initiatives for worker safety and health protection. These programs have a variety of names, including: Accident Prevention Programs, Injury and Illness Prevention Programs, and Comprehensive Safety and Health: states that operate their own state OSHA program have until January 1, 2016 to implement the new requirements. To date, only four states have adopted and put into effect the new federal OSHA reporting requirements. Not all States have met these guidelines but have a process in place.</a></li> <li>• <b>GWPA</b>: Compliance with Laws, Forestry Practices and Safety Rules. Suppliers are signatory.</li> <li>• Ark Pro Logger, Tx Master Logger, MS Pro Logging Mgr and LA Master Logger curriculums promote health and safety of forest workers by providing OSHA training.</li> <li>• Drax Biomass has adopted the Drax Group PLC Safety and Health Policy. The policy indicates that safety and health rules and procedures have been established and enforced.</li> </ul>

	<ul style="list-style-type: none"> <li>• Drax Biomass has signed the <b>FSC® Evaluation of the organization’s commitment to FSC® values and occupational health and safety in the Chain of Custody FSC-PRO-20-001 V1-0 EN regarding occupational health and safety.</b></li> <li>• Drax and DBI has <b>employee manuals</b> and <b>EEO policies</b> in place.</li> </ul>
Means of Verification	<p>Lead Verifier: <a href="#">High levels of trained loggers</a> receiving safety training present due to market requirements. Laws and regulations exists to establish and govern minimum standards and establish safe conditions for employees. Related <b>management systems, internal processes</b> and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>F&amp;W BMP Report</b></li> <li>• <a href="#">Employment Law and Labor Law Requirements</a></li> <li>• <a href="#">Logger Training Report</a></li> <li>• <a href="#">OSHA 1910.266 and eTOOL</a></li> <li>• <a href="#">Employment Law Poster</a></li> <li>• Federal Laws applicable to Labour</li> <li>• <b>DBI employee handbook</b> has <b>EEO policies</b></li> <li>• <b>Employee training log</b></li> <li>• State specific labor laws</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	<p>none</p>

	Indicator
<b>2.9.1</b>	Biomass is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.
Finding	<ul style="list-style-type: none"> <li>• The primary feedstock for the pellet plant is SYP with minority amounts of incidental hardwoods. SYP rarely grows in fully inundated and traditional wetlands or peatlands. Where there are wetlands in the sourcing area, these are strongly protected by legislation to remain as wetlands through the Clean Water Act. No change can be made to the hydrology of wetlands without the permission of the Army Corps of Engineers, who oversee and implement CWA legislation. Wetlands designated as sensitive areas will be included in DBI’s <b>DDS</b>.</li> <li>• Implementation of BMP’s is a further control to maintain the quality of wetlands.</li> <li>• There is not a predominance of peat soils in the pine growing areas of the catchment.</li> <li>• Historic consumption (TPO and FIA reports) vs <b>current consumption including ABE</b></li> <li>• Over the past eight years or so, we have seen removals decrease while growing stock increased. This was due to the economic downturn. This data can be accessed using FIA statistics. FIA statistics and TPO reports track the ebbs and flows of forest harvests vs growth capturing influences such as the recent economic downturn.</li> <li>• <b>GWPA</b> includes obligatory requirements to implement BMPs and fiber specs to furnish SYP.</li> </ul>
Means of Verification	<p>Lead Verifier: <a href="#">Monitoring and high implementation rates of forestry best management practices (BMPs)</a> helps maintain carbon stocks. <a href="#">High levels of trained loggers</a> are present due to market requirements. No predominance of high carbon storing soils present in wood procurement basin. Related <b>management systems, internal processes</b> and company policies are reviewed as part of third party external audits.</p>

	<ul style="list-style-type: none"> <li>• Preamble citations</li> <li>• <b>F&amp;W BMP Implementation Report</b></li> <li>• <a href="#">Forest Soils, Charles H. (Hobie) Perry and Michael C. Amacher</a></li> <li>• <a href="#">State BMP Manuals</a></li> <li>• <a href="#">F2M BMP Compliance Blog</a></li> <li>• <a href="#">BMP implementation and info library</a></li> <li>• <a href="#">Clean Water Act (sec 404)</a></li> <li>• <a href="#">FIA Data and supplemental reports and analysis</a>, TPO reports including MS Institute for Forest Inventory</li> <li>• <a href="#">The Southern Forest Futures Project: technical report. Gen. Tech. Rep. SRS-178., Southern Research Station</a></li> <li>• <a href="#">Resource Planning Act Data</a></li> <li>• <a href="#">Decline in the pulp and paper industry: Effects on backward linked forest industries and local economies, USDA</a></li> <li>• <a href="#">Market Response Article, Karen Apt, USDA</a></li> <li>• <b>Records showing use of SYP, including 3 Log and maps.</b></li> <li>• <a href="#">Forest Inv</a> and State Inv Fact Sheets (Ex. <a href="#">AR</a>)</li> <li>• Stakeholder Consultation</li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none

	Indicator
<b>2.9.2</b>	Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.
Finding	<ul style="list-style-type: none"> <li>• <b>Professional consultancy</b> carried out prior to construction of the plants, and on-going analysis of forest data, shows that forest inventories will continue to grow after the ABE is in full production. There will not be a reduction in planted area due to ABE's activity, and the forest management activities that are undertaken to supply fiber to the plants will help maintain the vigor and growing habits of the forest.</li> <li>• FIA data shows that forests in the catchment, and elsewhere in the South, have had increasing inventories and have also produced more wood per acre per year over the last 50 years. This is widely acknowledged as being due to forest owners responding to markets. The biomass market is likely to assist in this promoting this response from owners.</li> <li>• Compliance with Best Management Practices ensures that areas with particular carbon sensitivities (stream sides and associated riparian habitats, and older trees) are subject to effective controls.</li> <li>• Southern Forest Futures reports that: after accounting for harvests, forest growth, land use, and climate change, the total carbon pool represented by the South's forests is forecasted to increase slightly from 2010 to 2020/2030 and then decline, primarily due to urban encroachment.</li> <li>• Forest carbon Forecasts             <ul style="list-style-type: none"> <li>○ We estimate the carbon stored in southern forests in 2010 at about 12.4 billion tons, including carbon stored in eight pools: down trees, standing dead trees, litter, soil organic carbon, live trees aboveground and belowground, and understory plants aboveground and belowground. Aboveground live trees and soil organic material comprise 80 percent of the total carbon stock. Forecasts of future forest carbon stocks reflect changes in the amount of forest area and the composition of the forest</li> </ul> </li> </ul>

	<p>inventory. However, the model tracks only the carbon pool in forests and does not account for carbon transfers to agricultural and other land use pools. Likewise, the model does not account for carbon that leaves forests as products and may remain sequestered for long periods of time in housing or other end uses (e.g., Heath and others 2011).</p> <ul style="list-style-type: none"> <li>○ Changes in forest carbon pools reflect both changes in growing stock volumes and changes in forest area (figs. 5.16 and 5.17). Under most Cornerstones, tree carbon peaks in 2020 and then levels off or declines; the exception is the low-urbanization/high-timber-prices Cornerstone C whose forecast peaks in 2030. At most, the forest carbon pool in 2060 is 5 percent smaller than the pool in 2010 (a net emission of about 600 million tons). Carbon accumulates as a result of net biomass growth on forested lands (fig. 5.17.F).</li> <li>● “A little research into the records of states with significant forest products industry activity shows that many have a compliance rate higher than 90 percent. In fact, states with the most robust harvest activity often have the highest levels of compliance.” MS=93%, LA=96%, AR=86%, Tx=92%. <a href="#">Forest 2 Market’s BMP Compliance Blog</a></li> <li>● “Pulp, paper, and paperboard mills consume close to 52 percent of southern roundwood, providing a significant market to southern forest landowners. Declining numbers of pulpwood-using mills and downward trends in mill capacity, however, present a growing challenge to the southern forest sector.” United State Dept of Agriculture, 2015<sup>3</sup></li> <li>● The US and the US South has a 60 plus year history of both increasing production of forest products and an increasing forest inventory resulting in increasing carbon stocks</li> <li>● Over the past eight years or so, we have seen removals decrease while growing stock increased. This was due to the economic downturn. This data can be accessed using FIA statistics.</li> </ul>
Means of Verification	<p>Lead Verifier: <a href="#">Monitoring and high implementation rates of forestry best management practices (BMPs)</a> helps maintain carbon stocks. <a href="#">High levels of trained loggers</a> are present due to market requirements. No predominance of high carbon storing soils present in wood procurement basin. Related <b>management systems, internal processes</b> and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>● Preamble citations</li> <li>● <b>Drax FIA Study for Plant Placement, PPT</b></li> <li>● <a href="#">F2M BMP Compliance Blog</a></li> <li>● <a href="#">FIA Data and supplemental reports and analysis</a>, TPO Reports including MS Institute for Forest Inventory</li> <li>● <a href="#">The Southern Forest Futures Project: technical report. Gen. Tech. Rep. SRS-178.. Southern Research Station</a></li> <li>● <a href="#">Resource Planning Act Data</a></li> <li>● <a href="#">Decline in the pulp and paper industry: Effects on backward linked forest industries and local economies. USDA</a></li> <li>● <a href="#">Market Response Article, Karen Apt, USDA</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>● All means of verification reviewed</li> </ul>
Risk Rating	<p><input checked="" type="checkbox"/> <b>Low Risk</b>                      <input type="checkbox"/> <b>Specified Risk</b>                      <input type="checkbox"/> <b>Unspecified Risk at RA</b></p>
Comment or Mitigation Measure	<p>none</p>

<sup>3</sup> Consuelo Brandeis and Zhimei Guo (2015) Decline in the pulp and paper industry: Effects on backward linked forest industries and local economies. Forest Products Journal In-Press.

	Indicator
2.10.1	Genetically modified trees are not used.
Finding	<ul style="list-style-type: none"> <li>• <a href="#">The Global Forest Registry</a> indicates that the United States may be considered low risk in relation to wood from genetically modified trees.</li> <li>• At the same time it should be noted that United States is most advanced country in laboratory experiments and field trials of GMO species and thus the possibility that GMO species will be commercially used in US is realistic. If updated data becomes available about commercial usage of GMO species in US, the draft US NRA for this category will be updated and reviewed.</li> <li>• DBI's commitment to sustainable forestry states to "avoid trading and sourcing wood from forests in which genetically modified trees are planted."</li> <li>• CWRA and draft US NRA address this indicator and conclude low risk of supply chain becoming compromised by GMOs.</li> </ul>
Means of Verification	<p>Lead Verifier: Mechanisms and permitting processes in place to govern usage should economically viable uses emerge. Related <b>management systems, internal processes</b> and company policies are reviewed as part of third party external audits.</p> <ul style="list-style-type: none"> <li>• <a href="#">The Global Forest Registry</a></li> <li>• Forestry Department of FAO (Food and Agriculture Organization) working paper "<a href="#">Preliminary review of biotechnology in forestry, including genetic modification</a>", 2004</li> <li>• DBI's Commitment to Sustainable Forestry</li> <li>• Forestry Department of FAO (Food and Agriculture Organization) working paper "<a href="#">Preliminary review of biotechnology in forestry, including genetic modification</a>", 2004</li> <li>• <a href="#">Assessment of Lawful Harvesting and Sustainability of US Hardwood Exports, AHEC</a></li> </ul>
Evidence Reviewed	<ul style="list-style-type: none"> <li>• All means of verification reviewed</li> </ul>
Risk Rating	<input checked="" type="checkbox"/> <b>Low Risk</b> <input type="checkbox"/> <b>Specified Risk</b> <input type="checkbox"/> <b>Unspecified Risk at RA</b>
Comment or Mitigation Measure	none