



**GreenTools Government Confluence:**  
THE "UNCONFERENCE" FOR IMPLEMENTING CHANGE  
IN YOUR JURISDICTION.  
CO-HOSTED BY CASCADIA REGION GREEN BUILDING COUNCIL.

Session:  
**Creating Embodied Social Equity Through Projects**

Presenters:  
**Jessica Woolliams, Cascadia Region Green Building Council**  
**Robin Barr, The Forest Trust**

Date:  
**May 5, 2010**



## LIVING BUILDING CHALLENGE™ 2.0

A VISIONARY PATH TO A RESTORATIVE FUTURE

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## THE METAPHOR OF THE FLOWER

### ROOTED IN PLACE AND YET:

- Harvests all energy + water
- Is adapted to climate and site
- Operates pollution free
- Is comprised of integrated systems
- Is beautiful



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## WHY A CHALLENGE?

- Infusing inspiration and poetry
- Embracing the psychology of the 'end game'
- Rewarding early adopters
- Creating models for the future
- Stirring the pot
- Pulling the market forward



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IT TAKES A COMMUNITY...

Living Building Challenge is an evolving tool.

**Engage Experts**

- 100s of people throughout North America have provided guidance + contributed information
- Petal Committees in 2010

**Respond to real-time application**

- Community members' feedback via Dialogue clarifications + comments
- Ongoing staff research

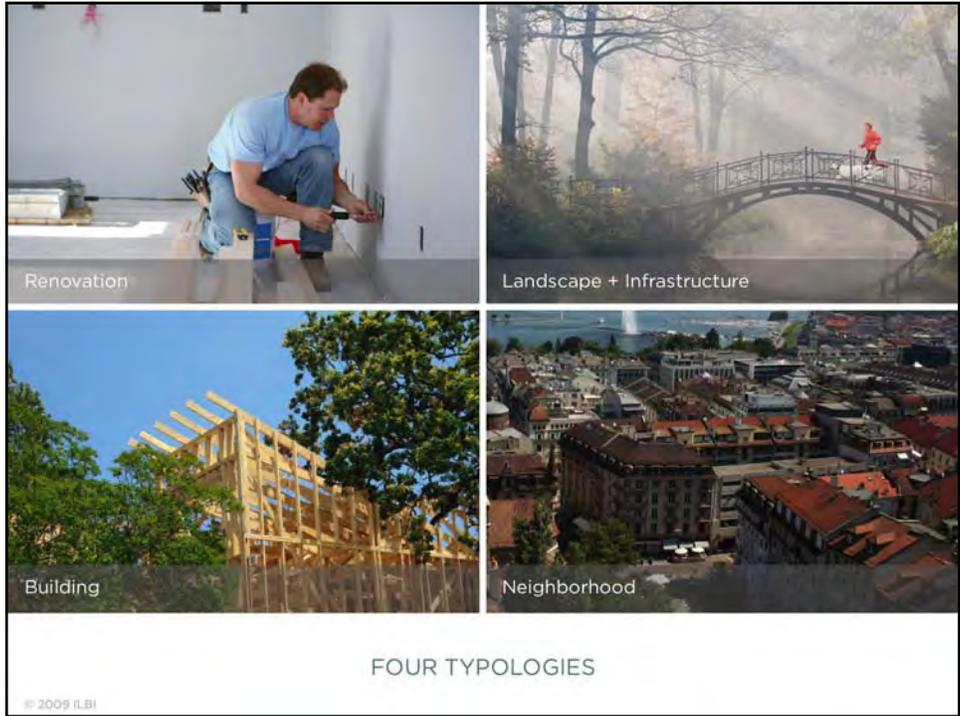
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**SEVEN PETALS**

SITE WATER ENERGY

HEALTH MATERIALS EQUITY BEAUTY



## TWO RULES

1. All Imperatives assigned to a Typology are mandatory.
2. Living Building Challenge certification is based on actual, rather than modeled or anticipated, performance.



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	NEIGHBORHOOD	BUILDING	LANDSCAPE + INFRASTRUCTURE	RENOVATION	Imperative omitted from Typology	Solutions beyond project footprint are permissible
SITE						LIMITS TO GROWTH
						URBAN AGRICULTURE
						HABITAT EXCHANGE
						CAR FREE LIVING
WATER						NET ZERO WATER
						ECOLOGICAL WATER FLOW
ENERGY						NET ZERO ENERGY
HEALTH						CIVILIZED ENVIRONMENT
						HEALTHY AIR
						BIOPHILIA
MATERIALS						RED LIST
						EMBODIED CARBON FOOTPRINT
						RESPONSIBLE INDUSTRY
						APPROPRIATE SOURCING
						CONSERVATION + REUSE
EQUITY						HUMAN SCALE + HUMANE PLACES
						DEMOCRACY + SOCIAL JUSTICE
BEAUTY						RIGHTS TO NATURE
						BEAUTY + SPIRIT
						INSPIRATION + EDUCATION

## SUMMARY MATRIX

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# 01

## LIMITS TO GROWTH



Projects may only be on greyfields or brownfields – previously developed sites that are not on or adjacent to

- sensitive ecological habitats (wetlands, primary dunes, old-growth forest, virgin prairie);
- prime farmland;
- within the 100-year flood plain.

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01 LIMITS TO GROWTH

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Project teams must document conditions prior to the start of work.

Characteristics of onsite landscape:

- native and/or naturalized species
- emulates density + biodiversity of indigenous ecosystems
- supports succession

**plant succession** The gradual evolution of vegetation over time. Also involved in plant community restoration. In *autogenic succession*, the plants themselves are the genesis of change; succession is directed from within the ecosystem.

# 03

## HABITAT EXCHANGE



For each hectare of development, an equal amount of land must be set-aside in perpetuity as part of a habitat exchange.

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Habitat selection and purchase should be managed by a Land Trust to ensure proper safeguarding and long-term care.

**land trust** a nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements.

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# 05

NET ZERO WATER



100% occupants' water use must come from captured precipitation or closed loop natural water systems that account for downstream ecosystem impacts, and that is appropriately purified without the use of chemicals.

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IF ALL OF EARTH'S WATER  
FIT IN A GALLON JUG, THE  
AMOUNT OF FRESH WATER  
ACCESSIBLE FOR  
CONSUMPTION WOULD FIT  
IN A TABLESPOON.

# 07

## NET ZERO ENERGY



100% energy needs must be supplied by on-site renewable energy on a net annual basis.

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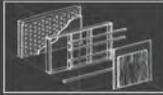


"ECO-BLING"

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# 11

## RED LIST



The project cannot contain worst-in-class materials or chemicals, such as carcinogens, persistent organic pollutants, bioaccumulative toxins, and endocrine disruptors.

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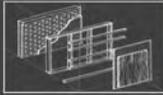
11 RED LIST

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- Asbestos
- Cadmium
- Chlorinated Polyethylene and Chlorosulfonated Polyethylene
- Chlorofluorocarbons (CFCs)
- Chloroprene (Neoprene)
- Formaldehyde (added)
- Halogenated Flame Retardants
- Hydrochlorofluorocarbons (HCFCs)
- Lead (added)
- Mercury
- Petrochemical Fertilizers and Pesticides
- Phthalates
- Polyvinyl Chloride (PVC)
- Wood treatments containing Creosote, Arsenic or Pentachlorophenol

# 13

## RESPONSIBLE INDUSTRY



The project must advocate for the creation and adoption of third-party certified standards for sustainable resource extraction and fair labor practices. Applicable raw materials include stone and rock, metal, and timber.

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13 RESPONSIBLE INDUSTRY

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For timber, all wood must be certified by the Forest Stewardship Council (FSC), from salvaged sources, or from the intentional harvest of timber onsite for the purpose of clearing the area for construction.

### WHY FSC?

- Triple bottom line: social, economic, environmental interests
- Supports health and long-term integrity of forests (biodiversity, habitat) and communities
- Provides strict management and monitoring procedures
- Chain of Custody + independent verification



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# EQUITY

Supporting a just, equitable world

# 16

HUMAN SCALE +  
HUMANE PLACES



The project must be designed to create human-scaled rather than automobile-scaled places, so that the experience brings out the best in humanity and promotes culture and interaction.

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16 HUMAN SCALE +  
HUMANE PLACES

Contributing to livable places

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YEAR	HOME SIZE	FAMILY SIZE	M <sup>2</sup> /PERSON
1950	91.3 M <sup>2</sup>	3.8	24.0
2008	232.3 M <sup>2</sup>	2.6	89.3



1950  
.....  
2008

NUMBER OF OCCUPANTS	APPROPRIATE HOME SIZE		WHERE HOME STARTS TO BE OVERSIZED	
	M <sup>2</sup>	SF	M <sup>2</sup>	SF
1	18.6 - 55.7	200 - 600	74.3+	800+
2	37.2 - 111.5	400 - 1,200	148.6+	1,600+
3	55.7 - 148.6	600 - 1,600	223.0+	2,400+
4	92.9 - 195.0	1,000 - 2,100	260.1+	2,800+
5	111.5 - 232.3	1,200 - 2,500	297.3+	3,200+
6	139.4 - 260.1	1,500 - 2,800	334.5+	3,600+
7	167.2 - 297.3	1,800 - 3,200	371.6+	4,000+
8	204.4 - 334.5	2,200 - 3,600	408.8+	4,400+

**HOW HOUSE SIZE HAS CHANGED OVER ALMOST 60 YEARS**

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# 17

## DEMOCRACY + SOCIAL JUSTICE



All primary transportation, roads and non-building infrastructure that are externally focused must be equally accessible to all members of the public regardless of background, age and socioeconomic class, with reasonable steps taken to ensure that all people can benefit from the project's creation.

Access for those with physical disabilities must be safeguarded through designs meeting the Americans with Disabilities Act (ADA).

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# 18

## RIGHTS TO NATURE



The project may not block access to, nor diminish the quality of, fresh air, sunlight and natural waterways for any member of society or adjacent developments.

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### Fresh Air

The project must be designed to protect adjacent properties from any noxious emissions that would compromise its ability to use natural ventilation.

### Sunlight

The project may not block sunlight to adjacent building façades and rooftops such that they are shaded in such a way to preclude access to daylight or use of renewable energy technologies.

### Natural Waterways

The project may not restrict access to the edge of any natural waterway, assume ownership of water contained in these bodies or compromise the quality or quantity that flows downstream.

18 RIGHTS TO NATURE

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# 19

## BEAUTY + SPIRIT



The project must contain design features intended solely for human delight and the celebration of culture, spirit and place appropriate to its function.

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## INSPIRATION + EDUCATION



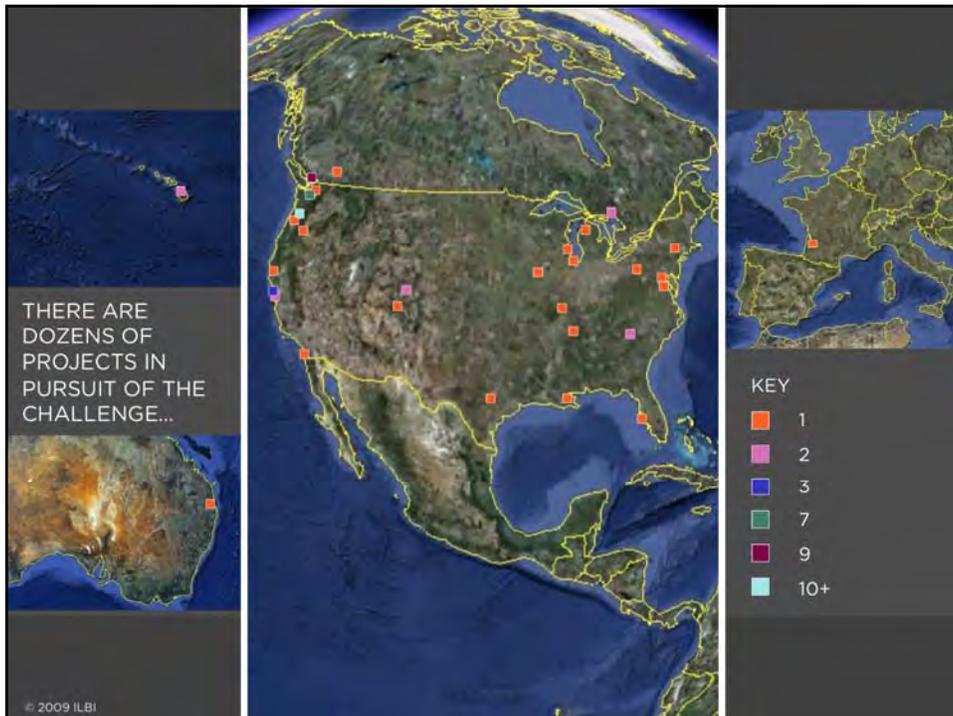
Educational materials about the performance and operation of the project must be provided to the public to share successful solutions and to motivate others to make change.

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**EDUCATIONAL TOOLS REQUIRED**  
for all projects other than single family residences:

- At least one annual public “open day”
- Educational web site
- Brochure
- Building Operations and Maintenance Manual
- Interpretive signage (may include real-time performance metrics)
- ILBI Case Study survey, for public viewing
- Other – as determined by the project team





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Social Equity Requirements  
in the  
Forest Stewardship Council  
(FSC)

Robin Barr

Social & Community Forestry Advisor

The Forest Trust (TFT)



## What is the Forest Stewardship Council (FSC)?

FSC - A global, multi-stakeholder member-based NGO founded in 1993, headquartered in Bonn, Germany. FSC-US established in 1995 as a National Initiative

3 chamber governance structure- environmental, social, economic

All stakeholders have a seat at the table



### FSC NGO Partners

- National Wildlife Federation
- The Nature Conservancy
- World Wildlife Fund
- Sierra Club
- Greenpeace
- Forest Ethics
- U.S. Green Building Council
- Oxfam
- Family Forests Alliance
- The Forest Trust (TFT)





## FSC Business Partners

16,000+ companies committed to FSC certification



## FSC Certification



- Market-based, non-regulatory forest conservation tool
- World's most robust forest management standards
- Affords consumers the opportunity to protect forest ecosystems and communities, and reward responsible forest management
- Third-party verification of forest management practices, chain-of-custody, and product labeling



Forest Management



Chain of Custody certification



Product Labeling

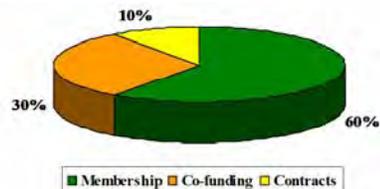


## How FSC works

- Set standards
  - ✓ Forest management
  - ✓ Chain-of-custody
- Accredit certifying bodies
- Authorize product labelling



## The Forest Trust



A Non-profit company registered in UK

Started in 1999

A Membership Organization

Initial Focus on Forest Industry & Trade

Financed by Members & Donors

*Linking Business with Responsible Forest Management*

# Why The TFT Exists.



cia environmental investigation agency

Environmental concern



GREENPEACE

RAINFOREST FOUNDATION

Market pressures

ROBIN WOOD

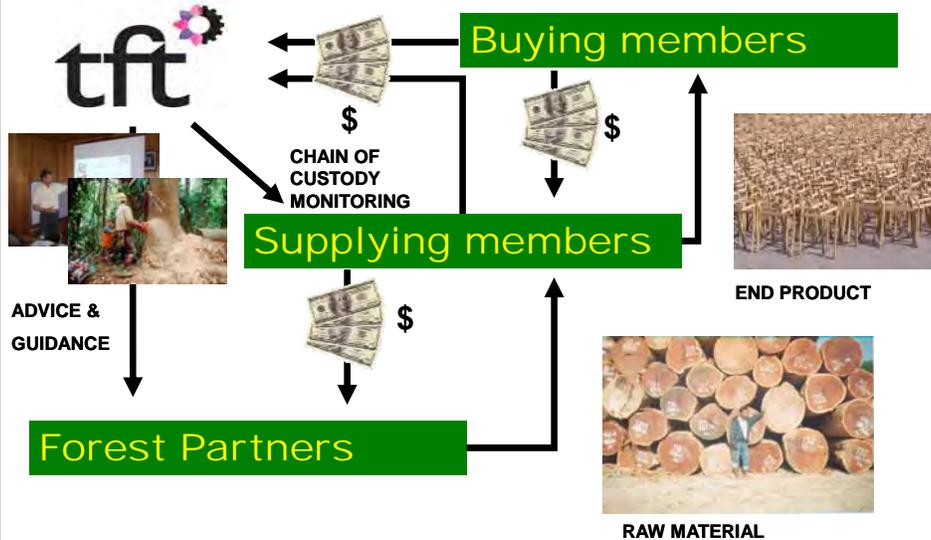


Desire for wood products from environmentally acceptable sources

TFT believes nations like Indonesia can meet market expectations

Linking Business with Responsible Forest Management

# How TFT Works



Linking Business with Responsible Forest Management

## FSC's 10 Guiding Principles

1. Compliance with Laws and FSC Principles
2. **Tenure and Use Rights and Responsibilities**
3. **Indigenous Peoples' Rights**
4. **Community Relations and Worker's Rights**
5. Benefits from the Forest
6. Environmental Impact
7. Management Plan
8. Monitoring and Assessment
9. Maintenance of HCV Forests
10. Plantations



### FSC Principle 2:

**Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.**

2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.

2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights.



**FSC Principle 3:** The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

3.1 Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.

3.3 **Sites of special cultural, ecological, economic or religious significance** to indigenous peoples shall be **clearly identified** in cooperation with such peoples, and **recognized and protected by forest managers**.

3.4 Indigenous peoples shall be compensated for the application of their **traditional knowledge** regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.

## FSC Principles 2 & 3 in practice



### Community Consultation



## FSC Principles 2 & 3 in practice



### Participatory Mapping

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## FSC Principles 2 & 3 in practice



### Dispute Resolution

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## FSC Principle 4.4: **Social Impact Assessment**

*Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations*

Who will be affected by different operations?

How will they be affected?

Based on TYPE of operation

Based on locality

Based on how the operation is conducted

**What changes to the Forest Management Plan must be made?**



## Principle 4: Community Relations and Workers Rights

- Work opportunities for local people
- Worker Health & Safety laws are met
- Appropriate grievance procedures
- ILO Conventions 87 & 98;
  - Workers' rights to organize and collective bargaining
  - No indentured workers
  - No child laborers
  - Forest Health & Safety guidelines



## Group Certification for Smallholders



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## FSC: Social Equity Principles 2-4

### **•Respecting the traditional and customary rights of Indigenous peoples and local Communities**

- *Bringing visibility to those whose rights have been ignored*

### **•Ensuring Workers' Health & Safety**

### **•Ensuring Workers' Right to organize; ILO conventions**

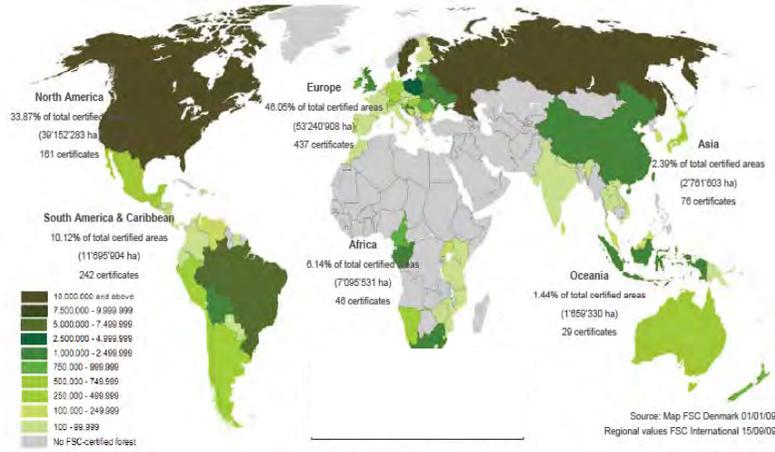
### **•Social Impact Assessments**

### **•Certification of Smallholders, 'Family Forests'**

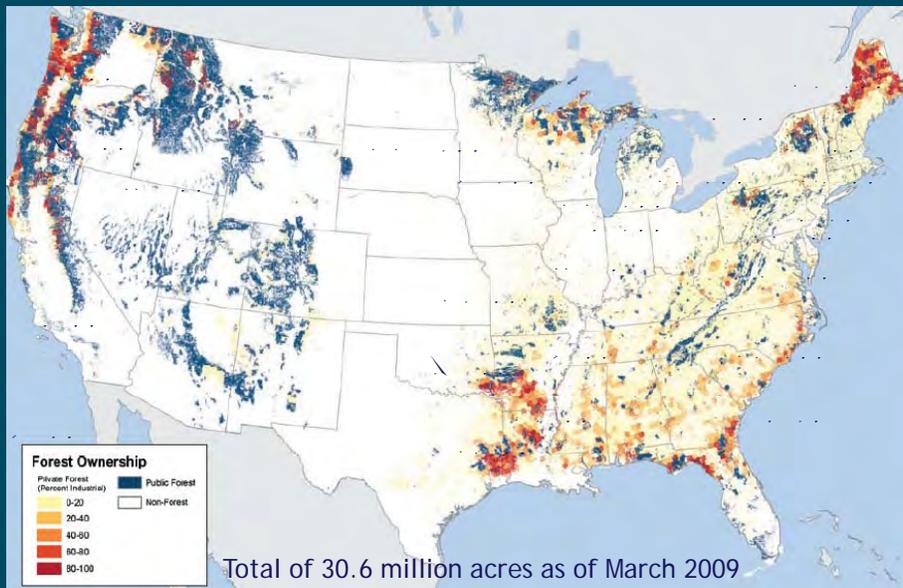
### **Encouraging Good Governance Worldwide**

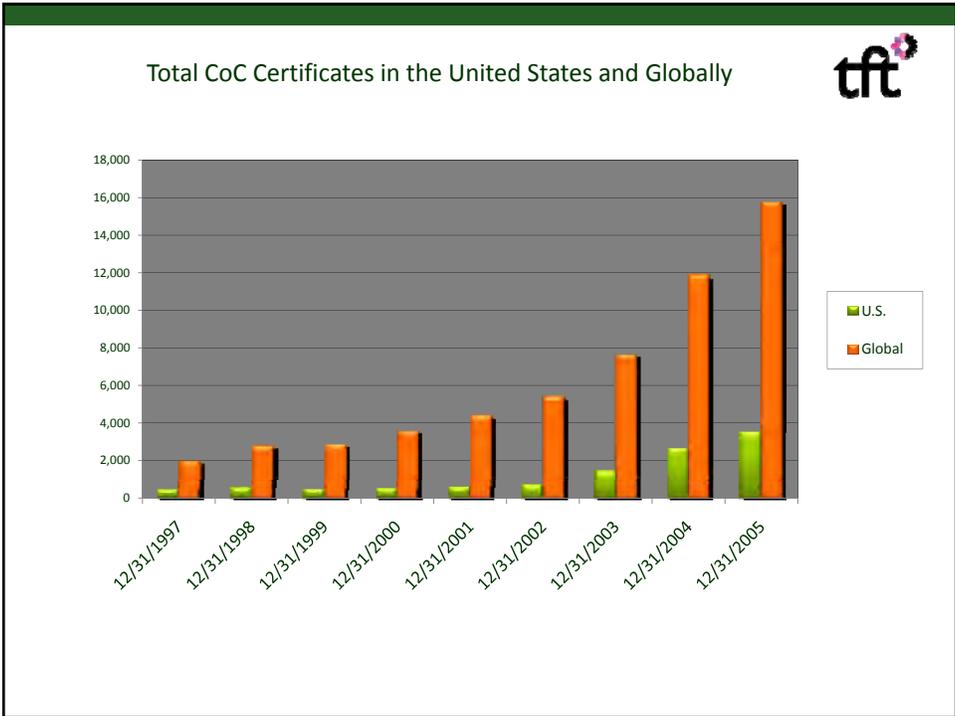
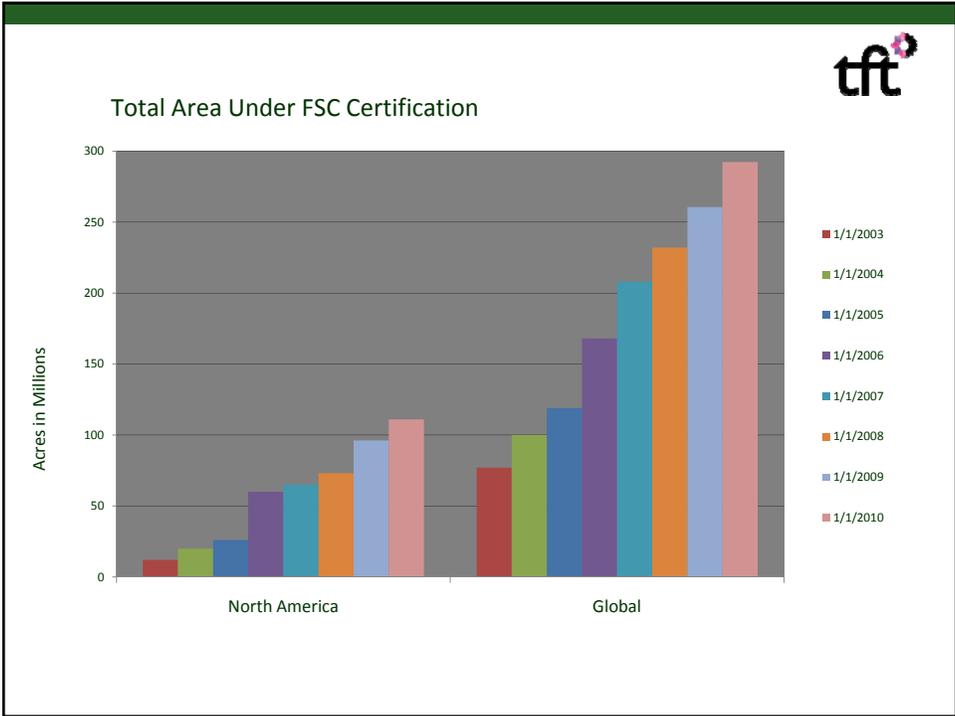


## FSC Certified Forests in 80+ Countries



## FSC-certified forestland in the US







## FSC-US Strategic Plan 2008-2010

Objectives	Strategies	Key Performance Indicators
1. Increase FSC's leadership within the global system	1.1. Advocate for US standards revision	1.1.1. US standards revision completed
2. Increase FSC's support to US certificates	2.1. Support US certificate holders	2.1.1. US certificate holders supported
3. Increase FSC's communication and competitiveness	3.1. Communicate FSC's value proposition	3.1.1. FSC's value proposition communicated
4. Increase FSC's acreage	4.1. Increase access for landowners	4.1.1. Landowners with increased access
5. Increase FSC's demand	5.1. Foster market linkages	5.1.1. Market linkages fostered
6. Increase FSC's access to certification	6.1. Increase access to certification	6.1.1. Access to certification increased
7. Increase FSC's orchestration & support of market partners	7.1. Orchestrate & support market partners	7.1.1. Market partners orchestrated & supported
8. Increase FSC's secure dominant position with major demand drivers	8.1. Secure dominant position with major demand drivers	8.1.1. Dominant position secured with major demand drivers

### Ensure system integrity

- Leadership within global system
- US standards revision
- Support to US certificates
- Communication and competitiveness

### Expand acreage

- Increase access for landowners
- Foster market linkages
- Increase access to certification

### Increase demand

- Orchestrate & support market partners
- Secure dominant position with major demand drivers



## FSC-PNW Strategic Plan

### Vision:

**FSC as the leading driver for responsible, viable forest management and a conservation-based economy in the Pacific Northwest**

### Strategic priorities:

- 1. Conduct regional supply chain mapping and analysis to inform a regional strategy**
- 2. Outreach, education and networking for landowners/mills/manufacturers**
- 3. Education around government, private and non-profit sector FSC opportunities**
- 4. Consumer Awareness and Demand for FSC activities**
- 5. Ensure system integrity**



## What YOU Can Do

- Procurement plans for wood/forest products that require FSC Certification
- Involvement in FSC Pacific Northwest Initiative
- Work with your suppliers to raise awareness about the FSC
- Require and reward use of FSC products

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Support is available



FSC US & FSC Pacific Northwest: Karen Steer;  
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The Forest Trust (TFT): Robin Barr;  
[r.barr@tft-forests.org](mailto:r.barr@tft-forests.org)



Thanks from the FSC US Team

