

# Progress Report on the Landowner Viability Work Plan

Kevin Birch  
Resources Planning

## Wood Products Work Group

- ▶ Chair Vince Porter - Governor's Workforce and Labor Policy Advisor
- ▶ OFRI
- ▶ OSU
- ▶ Oregon Best
- ▶ Sustainable NW
- ▶ OFIC
- ▶ ODF
- ▶ OR Business Council
- ▶ Business Oregon
- ▶ World Forestry Center
- ▶ Wood Works
- ▶ AOC

## Context - Purpose and Scope

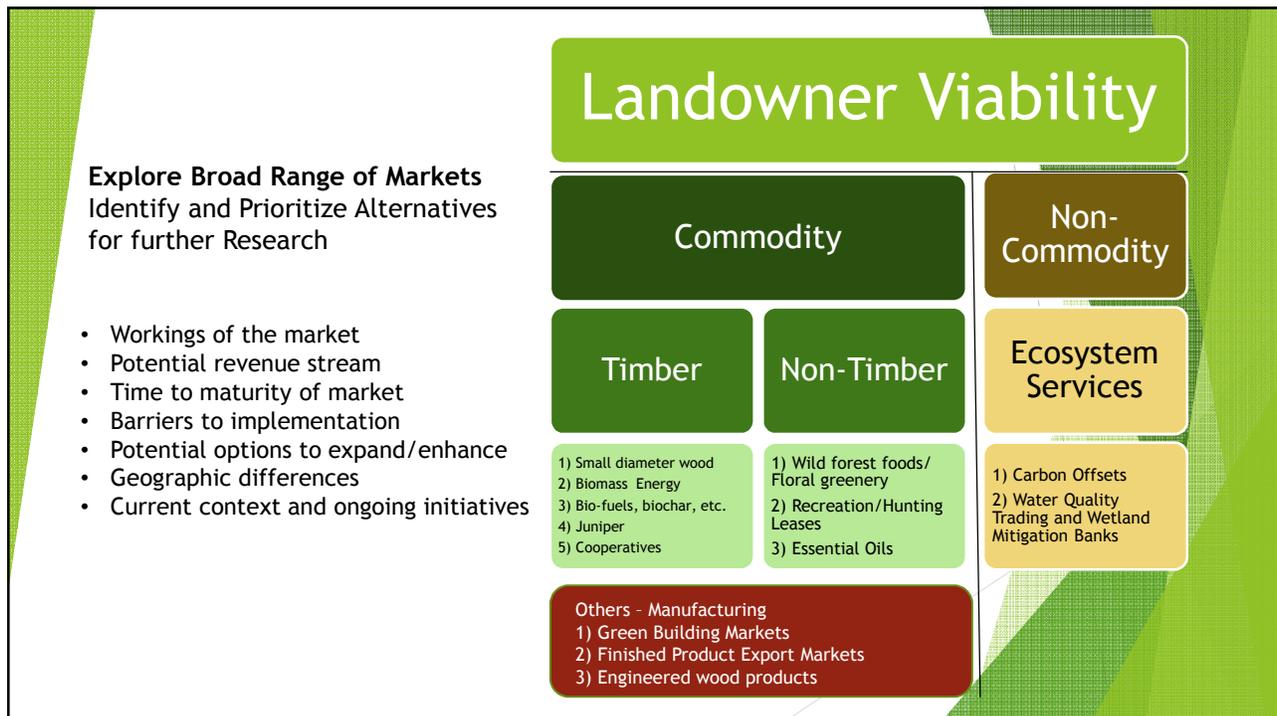
- ▶ Landowner Viability - Extremely broad complex topic
- ▶ Narrowed the Scope
  - ▶ 'Explore **alternate revenue sources** for forest landowners (in addition to timber production) and develop **options to increase markets** for those sources of revenue'
  - ▶ Economic opportunity is a necessary component in keeping working forests working
  - ▶ Without markets, continued forestland investment diminishes
  - ▶ identifying, maintaining, and growing economic opportunity in the forest sector is essential

## Advisory Committee

- ▶ Jennifer Allen (PSU)
- ▶ Kevin Birch (ODF)
- ▶ Linc Cannon (OFIC)
- ▶ Jim Cathcart (ODF)
- ▶ Jim James (OSWA)
- ▶ Brandon Kaetzel (ODF)
- ▶ Mary Ann Rozance (Doctoral Student PSU)
- ▶ John Tokarczyk (ODF)

## Landowner Viability Work Plan Deliverables

1. Process to identify and prioritize alternative revenue sources for further research
2. Papers about alternative revenue sources
3. Recommendations for policy changes



## Areas for Further Exploration

- ▶ Pathways for Non-Timber Forest Products and Other Markets
- ▶ Small Diameter Wood
- ▶ Cross Laminated Timber
- ▶ Finished Product Export Markets

## Pathways for Non-Timber Forest Products and Other Markets

### Market opportunities for Cooperatives and Regional Branding

Juniper  
 Wild forest foods (i.e., mushrooms, etc.)  
 Floral Greenery  
 Essential oils  
 Ecosystem Services  
 Small Diameter Timber

### *Landowner Viability: Opportunities and Challenges related to Market Diversification for Family Forest Landowners*

*Jennifer H. Allen, Ph.D., Associate Professor,  
 Hatfield School of Government*

*Mary Ann Rozance, Doctoral Student and  
 IGERT Fellow*

*Portland State University*

*June 2015*

## Pathways / Cooperatives

- ▶ Barriers / issues
  - ▶ Production: Equipment, processing, packaging, storing, and shipping, Record keeping/Regulations, Hiring labor
  - ▶ Marketing: Many of these markets require the woodland owner to spend a lot of time thinking about consumers and selling their product directly to them. Further, it can be difficult for a landowner to compete with large-scale commercial marketing
  - ▶ Coordination: Difficult to coordinate around so different landowners to create steady supply to expand the niche markets
  - ▶ Start-up costs seem to be a huge barrier to both cooperative and branding efforts. Financial costs associated with establishing a non-profit or private company, purchasing equipment, marketing, and more can be an obstacle.

## Pathways / Cooperatives

- ▶ *What Helps Cooperatives Thrive*
  - ▶ Financial assistance: low interest loans, start-up grants, space at industrial parks.
  - ▶ Technical support: business and marketing plans; resource recovery strategies; silviculture and low-impact harvesting techniques
  - ▶ Organizational assistance: facilitators helping landowners and communities use cooperatives as economic development and environmental conservation tools
  - ▶ Successful efforts had external support from either government or foundations to overcoming these initial barriers.

## Pathways / Cooperatives

### ► Recommendations

- Suggest that better aligning existing incentives, financial technical assistance, cost share options, and programs that provide assistance to landowners in managing the non-commercial aspects of their property may help in developing new markets and increasing the participation of landowners in active management and revenue diversification opportunities.
- Expand Awareness of Existing Programs. ODF may want to inventory its existing programs that provide support to landowners and assess whether there are opportunities to communicate these programs more broadly.
- Inventory and Communicate Funding Opportunities. ODF may want to inventory the kinds of state, federal, and community-based funding resources available

## Pathways / Cooperatives

### ► Next Steps

- Resources Planning - Inventory funding sources available for product development, business planning, start-up investments, capital investments
- Private Forests - will explore having a staff person focused on providing support to landowners on organizational development as part of a new Strategic Initiative for Family Forestlands.

## Small Diameter Wood Study

This study looks at market opportunities/characteristics of small diameter wood for use in:

- Lumber
- Pulp Chips
- Shavings
- Post and Pole
- Briquettes
- Pellets
- Biomass (CHP)
- Firewood
- Fuel Chips

### Eastern Oregon Small Diameter Wood Study

Completed for:  
**The Oregon Department of Forestry**

### Draft Report

 THE BECK GROUP

Project Report  
June 2015

## Small Diameter Wood Study

Two Part Evaluation

1. Small Diameter Market Opportunity Analysis
2. Regional Small Diameter Supply Assessment

## Small Diameter Market Opportunity and Operating Analysis

- ▶ Examination of material and operating requirements for small diameter operations
  - ▶ Biomass heat and power, briquettes, firewood, fuel chips, pellets, posts and poles, pulp chips, sawn lumber from small diameter logs, and shavings.
- ▶ Operation Costs for Small Diameter relative to large diameter
- ▶ Transportation Considerations
- ▶ Stand Alone Operations and Diversified Operations
  - ▶ Intensive Sorting and Merchandising
  - ▶ Market Driven Production

## Regional Small Diameter Supply Assessment

- ▶ **Supply Profile Knowledge** is critical to informing investment and operational decision making
- ▶ Study includes **volume estimates by diameter and species for “biomass”** from Federal timber sales and stewardship contracts
- ▶ “Biomass” in this case is not residuals but instead small diameter material which can be utilized in the production of value added goods
- ▶ **Estimates** will be based upon material that is marketable and will be or is planned to be harvested and removed, **based on the sales contract.**
- ▶ Results are pending.

## Return to Fiber / Return to Log

\$ per bone dry ton basis

	Lumber	Pulp Chips	Shavings	Post and Pole	Briquettes	Pellets	Biomass (CHP)	Firewood	Fuel Chips
Sales Value (f.o.b. plant)	206	76	178	195	167	160	107	95	25
Conversion Cost (Inc. dep. and owner return @ 15%)	109	19	126	144	126	122	72	60	19
<b>RTF/RTL Value</b>	<b>97</b>	<b>56</b>	<b>52</b>	<b>51</b>	<b>41</b>	<b>38</b>	<b>35</b>	<b>35</b>	<b>6</b>
BDT/Year	137,000	84,000	10,212	5,000	9,900	47,000	121,000	9,400	84,000
Cap EX (\$ millions)	40	2.5	2.5	1.5	2.0	10	25	0.5	2.0

Source: The Beck Group, Forest Products Planning and Consulting Services Portland, Oregon

## Small Diameter Market Opportunity and Operating Analysis

### Next Steps:

Study is relevant as a better understanding of the nexus between resource opportunity and operational requirements will inform investment on small diameter opportunities

### Initial stakeholders to be apprised include:

- ▶ State and Federal Partner Agencies (Regional Solutions, Oregon Business Development Department, Oregon Best, Pacific Northwest Manufacturing Partnership, USFS)
- ▶ Research Partners: Oregon State University supporting Wood Utilization Grants
- ▶ Private Interests: US Endowment for Forestry and Communities, Cooperative, Collaboratives and other public private entities associated with PNW forest restoration, rural economic development, and small diameter utilization

## Cross Laminated Timber (CLT)

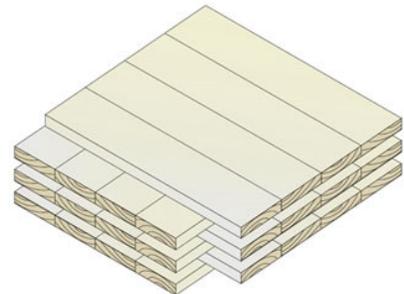
Construction sector consumed 66% of all lumber and 83% and 52% of all structural and nonstructural panels,

Within construction, new housing construction accounted for 56% of wood products, whereas repair and remodeling accounted for 34% and **nonresidential construction accounted for 10%**



## Cross Laminated Timber

- ▶ CLT is an emerging opportunity with significant growth potential
  - ▶ The first US CLT Production Facility is currently in development in Drain - DR Johnson
- ▶ CLT panels are utilized in an array of commercial structures and infrastructure including tall buildings (+10 stories)
- ▶ Renewability, performance, and flexibility coupled with build speed and lower costs is fueling CLT growth
- ▶ The potential opportunity for CLT in the Pacific Northwest is significant
  - ▶ The Pacific Northwest Manufacturing Partnership will be a factor in driving additional siting and production investment as well as market development



## Cross Laminated Timber

### Developing Research

- ▶ Recently OSU along with ODF who is participating as a co-Principal Investigator were awarded a grant to examine and identify the potential of utilizing small diameter wood in CLT production

### OSU and ODF Research Goal

- ▶ Evaluate milling efficiency across technologies and determine the technical and commercial viability of utilizing small diameter logs (as small as 4" diameter) generated in the east-side restoration in structural CLT products

## Cross Laminated Timber

### Research Objectives:

1. Evaluate efficiency and recovery of processing small diameter logs using different processing technology
2. Build and test CLT panels utilizing low-value lumber from forest restoration operations in core layers of homogeneous and hybrid laminations
3. Assess logistics options (primary processing, transportation routes/costs) on commercial viability relative to resource available
4. Propose respective changes to the product standard for CLT utilization - To advance manufacturing based on findings of small diameter suitability

## Cross Laminated Timber

### Next Steps:

- ▶ Two year project
- ▶ Study outline is currently in development and positions are being hired to implement efficiency, build, and testing
- ▶ Material selection and processing evaluations will begin w/in a year
- ▶ CLT production will follow along with stress and engineering testing
- ▶ Upon study completion report and findings will be available to inform production and operational considerations
  - ▶ Small diameter supply assessment will support this evaluation

## Finished Product Export Markets

Lumber Exports to Asia are an Under-utilized Market

In 2013:

Oregon - 3% of lumber, 15% of logs

BC - \$1.9 billion lumber

### Oregon's Markets

Most Oregon wood used in single family housing

70% of Oregon wood goes to west-coast markets

Only 14.7 percent of single-family starts are in the West

Limited demand / fluctuates with housing starts



## OFPA Certification of ASTM D76120 Standard

- ▶ Certification is becoming a key component for access to international markets
- ▶ In Oregon nearly 60% of forestland is federal with an additional 3.3% owned by the state, public lands are not certified
  - ▶ Roughly 33% is privately owned, of this 40% is certified while the remaining 60% is uncertified
- ▶ **Uncertified Oregon wood** and products receive **no market recognition or capacity to differentiate** relative to domestic or foreign producers operating under less rigorous standards

## OFPA Certification of ASTM D76120 Standard

- ▶ Requirements of the **Oregon Forest Practices Act (OFPA)** and comprehensive land use plans **create standards** which are in many respects **comparable to recognized certification systems**
- ▶ One mechanism to address this challenge includes third party certification of OFPA and ODF administration to an internationally recognized forestry standard
  - ▶ The American Society for Testing and Materials (ASTM) standard on forest certification systems (ASTM Standard D7612) meets this criterion
  - ▶ The D7612 standard is voluntary and consensus based and was created to categorize fiber procurement systems internationally to facilitate differentiation and identify systems which can ensure fiber meets specific consumer demands

## Green certification of wood products

- ▶ Goal - obtain “green certification” for all wood harvested under the Oregon Forest Practices Act (OFPA)
- ▶ ASTM D7612 is referenced as the basis upon which the International Green Construction Code (IgCC) accepts bio-based materials (IgCC Section 505.2.4) under the “equivalent fiber procurement system” provision.
  - ▶ Responsible source - from jurisdictions with regulatory or quasi-regulatory programs to implement best management practices
  - ▶ Certified source - Certification systems such as PEFC, SFI and FSC

## OFPA Certification of ASTM D76120 Standard

### Qualified Third Party Audit of OFPA and ODF Administration

- ▶ Recently an ISO certified **third party** entity (PFS Corporation) **completed an evaluation** of the OFPA and ODF administration relative to the ASTM D7612 standard
- ▶ The evaluation resulted in certification of the **ASTM standard being met** and a certificate was provided
- ▶ **Commercial application** of the certification is **limited until** a qualifying **chain of custody process** can be implemented which will allow landowners and processors a mechanism for utilizing the certification in conjunction with products.

## OFPA Certification of ASTM D76120 Standard

### Next Steps

A chain of custody will be developed which will permit landowners and processors, who wish to participate, a mechanism for incorporating certification as an element of their market strategy

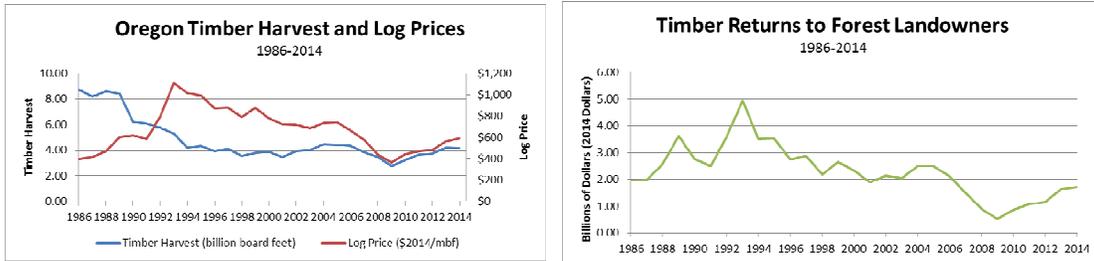
Initial market development opportunities include:

- International Green Construction Code (IgCC) compliance
- USDA Bio-Preferred Program recognition and Federal Preference
- Capacity to request Voluntary Reports (VARs) from ICC-ES
- Ability to market goods as certified responsible
- Ability to craft a regional brand

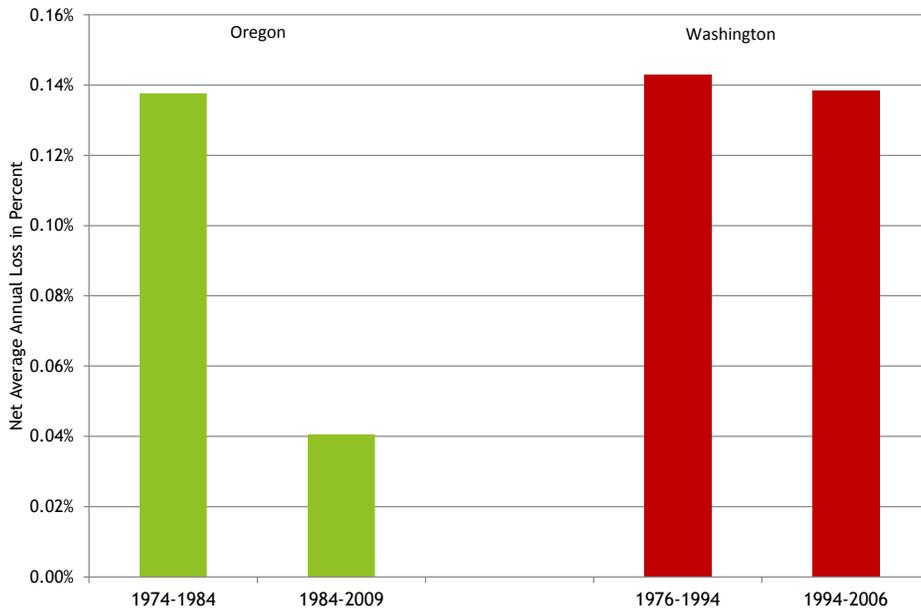
## Next steps in the Landowner Viability Work Plan

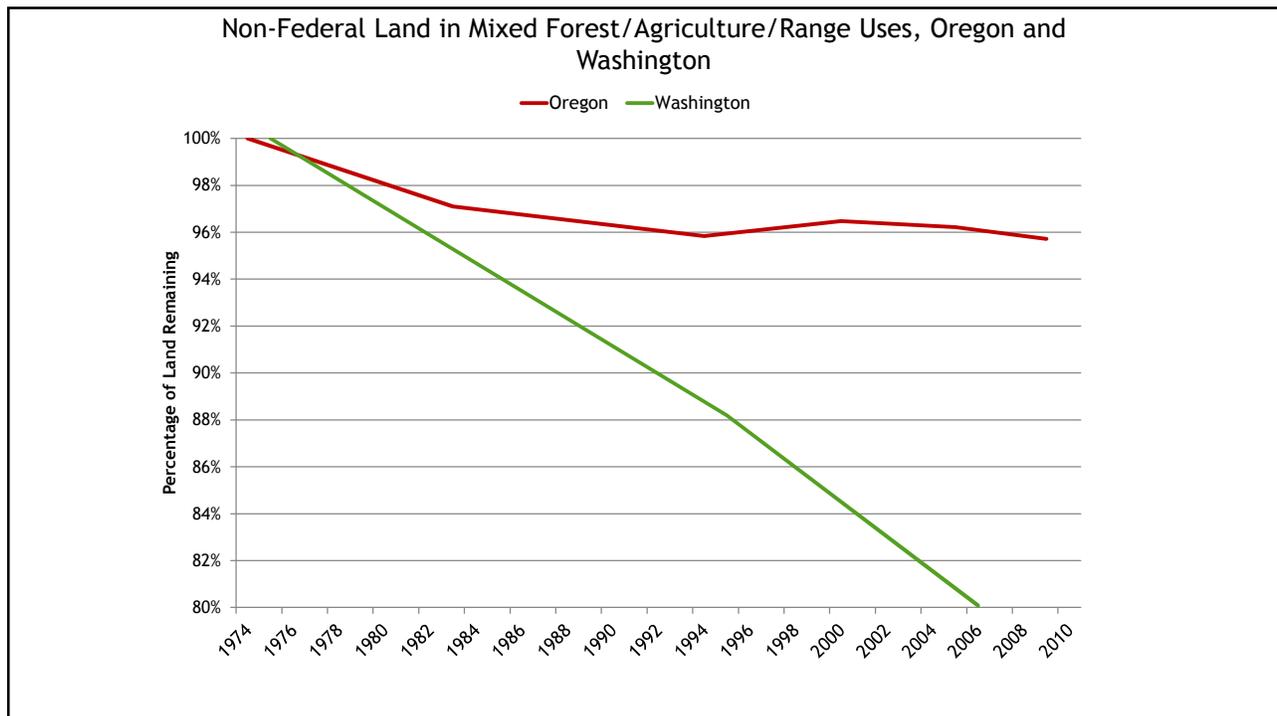
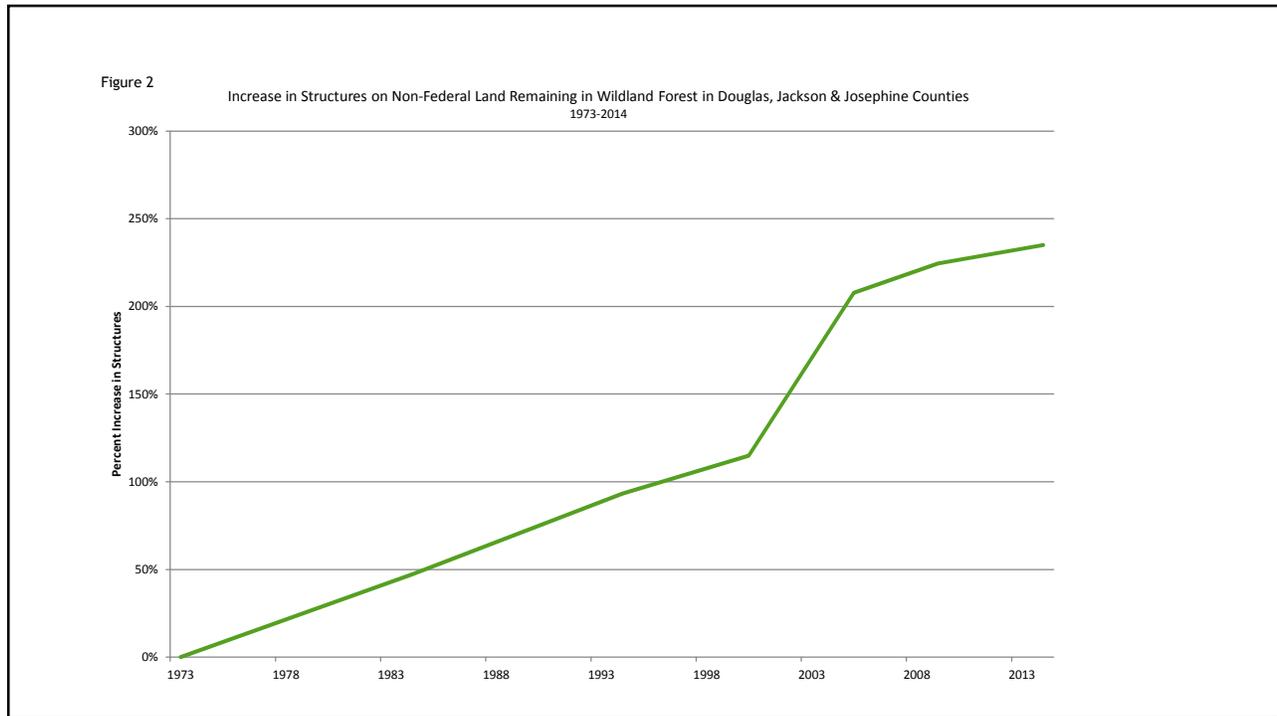
- ▶ Continue work on the 4 projects
- ▶ Outreach to other organizations
- ▶ Keep the Board informed about progress

## Returns to Landowners



### Average Annual Loss of Private Resource Land to Development Before and After Implementation of Land Use Plans





## Characteristics of good indicators

- ▶ Relevant
- ▶ Understandable
- ▶ Practical and feasible
- ▶ Measurable
- ▶ Sensitive to change
- ▶ Scale appropriate
- ▶ Scientific merit
- ▶ Linkable to environmental, economic, and social models, forecasting, and information systems