



# Describing Green Jobs

## Identifying key characteristics and criteria

Given the diversity of stakeholders attending the convening, meeting participants started the morning by discussing their perspectives on the core characteristics of and criteria for “green jobs”. After many ideas were shared, the group largely agreed on a few core characteristic elements, which were then compared to the Bureau of Labor Statistics’ definition of green jobs. Meeting participants agreed the Bureau’s definition plus the addition of these core elements provides a working definition for collaborative purposes. *(All characteristics and criteria shared by participants are included in Attachment A)*

### Bureau of Labor Statistics Definition

Green jobs are either:

- Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources
- Jobs in which workers’ duties involve making their establishment’s production processes more environmentally friendly or use few natural resources



### Other Elements Desired by Participants

Includes a youth focus

Engenders equity, accessibility to all

Climate aspect

Jobs that increase visibility, informing public

Fosters a living wage and worker health safety

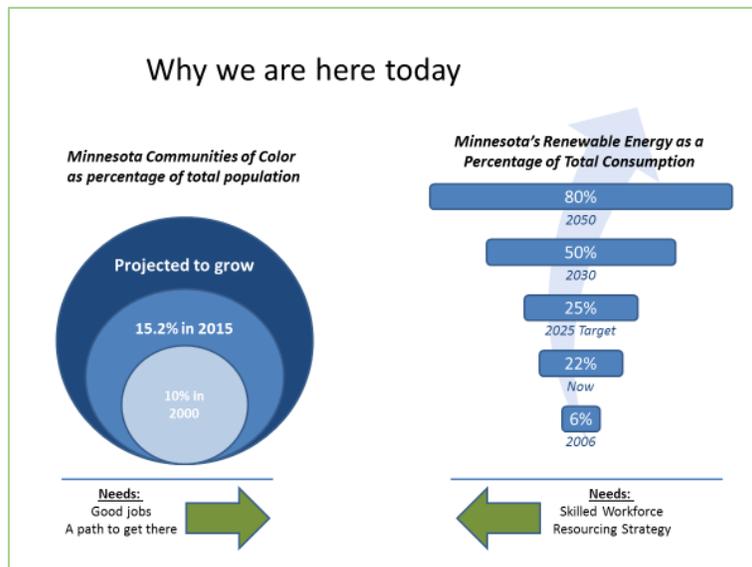
Sector with community ties and relationships

# Setting Context

## Looking at green jobs and the green economy

Some context surrounding the green jobs economy was provided by looking at:

- 1) The current state, opportunities, and challenges (Janet Brown, Climate Generation)
- 2) Current needs and a local example of challenges encountered (Jamez Staples, Renewable Energy Partners)
- 3) A collaborative success story in California (Elena Foshay, Center for Energy and Environment)



### Green Energy Training Services (GETS)

- Job training program implemented by **Rising Sun Energy Center** in Berkeley, CA
- Started in 2008 as an ARRA-funded 80-hour energy efficiency training program
- Evolved to become an 11-week construction pre-apprenticeship program
- Added solar PV installer training in 2014
- Added an all-women pre-apprenticeship training class in 2016

Photo Courtesy of Rising Sun Energy Center

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Center for Energy and Environment

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# Creating the Minnesota We Want to See

Sharing perspectives on progress

Meeting participants discussed in small groups the question of, “what would a just, sustainable Minnesota look like?” The following captures four main themes that emerged across groups and the attributes that underlie these themes.

## Vibrant

- Resilient
- Quality of life
- Healthy
- Fair
- Health-promoting

## Community and Values Led

- Community ownership
- Redefining leadership
- Democracy
- Values/ethics
- Self-determination



## Equitable and Just

- Equity
- Equal opportunities and access to the goods
- Diversity
- MOU for tribal nations to engage in projects
- Security for all

## Boundaryless

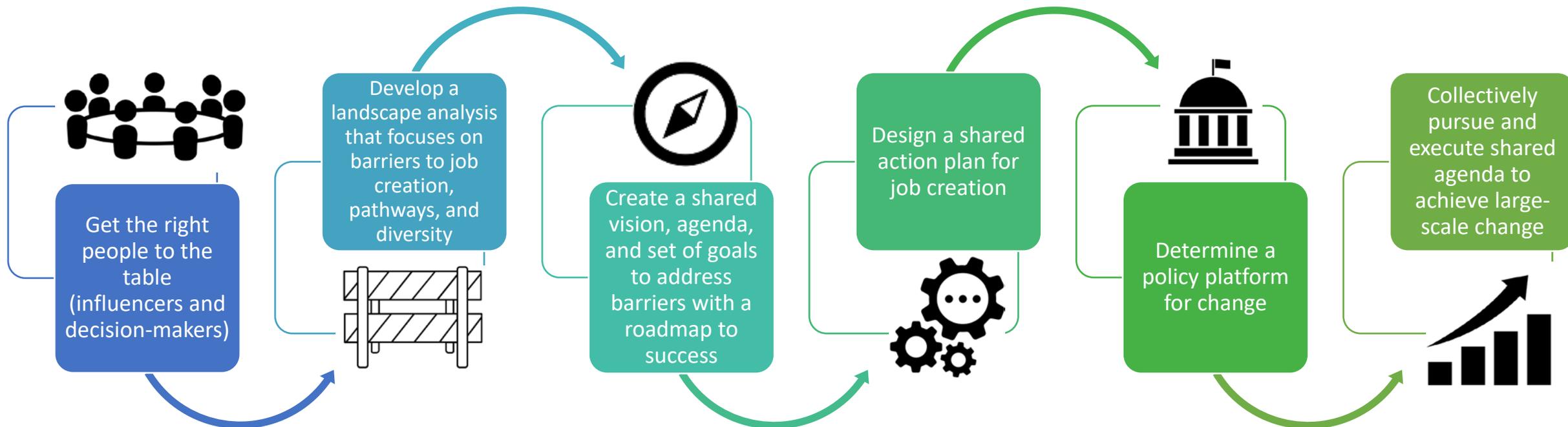
- Bridging gaps
- Integration across sectors
- Ecosystem to realize goals
- Collaborative and interrelated
- Not controversial



# Determining How to Make This Different

Mapping the organizations and programs/initiatives involved in green jobs

After mapping all of the work that is happening within organizations and through programs and initiatives, the group discussed what is needed to make a large-scale collaboration different and distinct from other efforts that focus on green jobs. There was agreement that a “collaborative container” that includes specific key attributes is required to foster a shared agenda and action plan to achieve needed change and progress.



# Priorities based on post survey

Priorities
1. Have a focused, tactical conversation on barriers of job creation and pathway/areas (66%)
2. Complete a landscape analysis (including HS grad rate of people of color, job projections in STEM competency, skills needed for jobs, state models that exist, graduation rates from programs, gap) (62%)
3. Develop a policy platform to work from and support to back it up. (42%)
4. Create a proposal to scale up to state agency for funding and support – provide data/case. (29%)
5. Develop a strategy and communication for broad, bi-partisan, urban-rural support (29%)

# Meeting Participants

Ellen Anderson - Energy Transition Lab, UMN	Michael Krause - Kandiyo Consulting
Eric Atonson - Conservation Corps Minnesota & Iowa	Abby Moore - Mississippi Watershed Management office
Nina Axelson - District Energy/EverGreen Energy	Kelly Muellman - City of Minneapolis- Sustainability
Kaela Berg - Sierra Club	Megan O'Hara - Minnesota Interfaith Power & Light
Robert Blake - Minnesota Interfaith Power and Light	Patty O'Keefe - MN350
Janet Brown - Climate Generation: A Will Steger Legacy	John Olson - MN Department of Education
Alex Clark - Turnlane Partners	Pete Parris - Sheet Metal Workers
Timothy DenHerder-Thomas - Cooperative Energy Futures	Annie Perkins - Andersen Corporation
Julie Drennen - Conservation Minnesota	Kristen Poppleton - Climate Generation: A Will Steger Legacy
Jim Erchul - Dayton's Bluff Neighborhood Housing Services	Scott Randall - Century College
Sarah Etzel - Minneapolis Public Schools	Will Seuffert - MN Environmental Quality Board
Abby Fenton - Climate Generation: A Will Steger Legacy	Dane Smith - Growth and Justice
Elena Foshay - Center for Energy & Environment	Jamez Staples - Renewable Energy Partners
Bree Halverson - BlueGreen Alliance	Paula Swingley - Mississippi National River and Recreation Area
Eric Holmberg - TakeAction Minnesota	Asia Ward - REcharge Labs
Erin Olson - RealTime Talent	Lewis White - Turnlane Partners
Jack Kluempke - Commerce Department	Denise Wilson- Office of Enterprise Sustainability
Paul Klym - Career and Technical Education - Minneapolis Public Schools	Neal Young - MN DEED

# What attendees had to say

“It was great to see so many folks with different expertise, interested in moving a green jobs agenda forward.”

“Some great minds that are passionate about creating a better future, what’s more hopeful than that?”

“It was great to gather with colleagues who do similar work, but we have few opportunities to come together.”

“I really enjoyed networking and seeing this side of environmental and conservation work. My organization doesn’t connect often with this group, and there are some really huge opportunities around promotion of green jobs!”

A post-survey found 62% of participants left feeling hopeful, energized (43%) and connected (43%), but, some also left feeling overwhelmed (29%), knowing there is more work to do to move this work forward.

# Appendix

# Appendix A: Describing Green Jobs - Characteristics & Criteria

Family sustaining wages while sustaining environment	Content and action	Change world reliable, fair wage
Living wage	Building community wealth (\$, social capital, skills, autonomy)	Infrastructure that supports a healthy planet
Part of a just transition (community and development economic + health)	Multi sector (energy, water, circular economy)	Goal is for all jobs to be green jobs
Balance between environmentally beneficial, socially responsible, and fiscally accountable	Foster + support cross-sector opportunity)	Contributes something positive
Socially aware	Contributes to climate mitigation	Change world
Providing specific skills toward the green economy	Ecosystem of green jobs. Example: Information technology supports data collection of renewables	Healthy and generative for workers
Hands-on opportunities	Depth more than breadth	Does not harm workers' health
Get young interested early	Solar growth + expansion in MN through partnerships	Living wage
Should be defined broadly to include transforming systems	Rural solar	Well-paid, stable employment opportunities
Sustains + grows future assets	Solar in K-12 schools	Helps build sustainable economy
Strong core academic skills (math/sci/communication)	Solar panels on casinos	In industries that advance sustainability
Outcomes that can be tracked + reported	Jobs related to renewable energy production	Technical
Transparent in their operations and services	Jobs primarily in public policy influencing for renewable energy conservation and environmental protection	Science based outcomes
Has a positive impact on climate change	Increasing visibility	Private or public sector
Employment in production of goods or services that are environmentally sustainable	"Green" has a silo effect. Cleaner + better than before = "green job" – so any industry can operate more green	Seem to fill disproportionately on non-profits... maybe because we call it "green work"
Jobs directly in sustainable work	Sustainable, long-term intent	Production supply chain
Jobs at companies that do sustainability work	Sustainability	Innovation
Jobs working towards reduced energy, waste, etc	Conservation	Related to energy conservation
Jobs related to environmental protection	Preserve nature	Jobs in industries working toward alternative energy, water, etc
Reducing resource (like energy) use	Sustainable processes	Inspire learning <u>why</u>
Carbon free future	Reduce carbon footprint	Knowledge transfer apprenticeships
Directly or indirectly improves environment	Environmentally beneficial	Reduces extracting of raw materials
Wilderness experience as an original source of passion	Benefits environment	Creating more renewable energy sources
Don't pollute community/are good to neighbors	Work towards goals of reducing carbon!	Includes energy, transportation, agriculture, and water

# Appendix B: Assessing the Landscape

Organizations that are currently focused (in some capacity) on green jobs creation

## Renewable Energy

- Minnesota Solar Energy Industries Assn (MNSEIA)
- Minnesota Renewable Energy Assn (MRES)
- Midwest Renewable Energy Assn (MREA)
- Fresh Energy Center for Energy + Environment
- REAL Solar
- Great Plains Inst.
- Cooperative energy futures
- MN interfaith power and light
- Sierra club
- REcharge labs
- Citizens climate lobby
- Clean energy resource teams (CERTS)

## Energy Efficiency

- Center for Energy and Environment
- Xcel Energy
- NEC (neighborhood energy commission)
- Great plains institute clean energy resource teams (CERTS)
- Blue Green Alliance
- Community Action Partnership Henn Co
- Sustainable resource center
- Conservation corps
- Green Corps
- CIP implements
- U.S. Green Building Council USGBC

## Transportation Organizations

- Transit for livable communities (x2)
- MAC – Minneapolis Airport Commission
- MetroTransit
- NiceRide
- Paddle Share

## Manufacturing/supply chain

- Labor unions
- MN AFL-CID
- Blue Green Alliance
- MN sustainable Growth coalition
- Patagonia
- Unilever
- Walmart
- Sustainable brands org
- Andersen corporation (windows)
- General Mills and Cargill

## Agriculture Organizations

- Labor unions
- IATP
- Land Stewardship Project
- Appetite for Change
- MN farmers union

## Utilities Organizations

- Community power
- Xcel/Centerpoint Apprenticeship Training

## Conservation/natural resources

- Sierra club
- Conservation Minnesota
- Three Rivers Park District
- Local Watershed districts
- Conservation corps
- The nature Conservancy
- Environmental initiative
- Minnesota environmental partnership
- Friends of the Mississippi River
- Mississippi park connection
- Cooperative energy futures
- Northcountry cooperative foundation
- Neighborhoods organizing for change
- PPL

## Community enterprise

- Sierra club

## Training/Workforce Development

- Labor unions
- Sierra club
- MN building trades
- MN AFL-CID IMT
- RealTime Talent
- Mississippi watershed mgmt. org
- Conservation corps
- YouthBuild
- Job corps

## Education

- Blue Green alliance
- Kid wind
- US Green Bldg. council
- Green schools coalition
- MN dept. education
- MN DNR
- MN PCA
- MN Assn for environmental education
- Recharge labs
- U of M Institute on Environment + Energy Transition lab
- Century college

## Youth development

- Just-B-solar
- Climate generation: Activist MN (YEA!MN)
- Matter Young People's Action Coalition MPIRG
- Minneapolis Park and Rec board
- Mississippi watershed mgmt. org
- Conservation corps
- Youth works
- Sunrise movement
- Power shift network

## Environmental Justice

- Sierra club
- Minnesota rural equity project
- Pollution control agency
- MN Interfaith power and light
- TakeAction MN
- Community power
- Minneapolis Renters coalition
- Community stabilization project
- Neighborhoods Organizing for Chance (NOC)
- Everybody in

## Government

- National park service
- AmeriCorps
- EPA
- Fish and wildlife services
- Pollution control agency
- Department of admin
- DEED
- Department of natural resources
- Metropolitan council
- City of Saint Paul railroad island project
- City of Minneapolis public works, sustainability, planning + ED, health
- Neighborhood associations

# Appendix B: Assessing the Landscape

Programs and initiatives that are currently focused (in some capacity) on green jobs creation

## Renewable Energy

- Low income accessible community solar
- Regional sustainable development partnerships (U of M extension)
- Solar projects with affordable housing
- New construction and financing models
- Renewable energy festivals and events

## Energy Efficiency

- Xcel Energy CIP (+ program implement org)
- Energy efficiency policy (MUSH) – state a local
- Home energy squads
- Inclusive financing coalition
- Home energy squad visits

## Transportation

- Safe Routes to school (MNDOT)
- Light rail expansion (TLC)
- MN Drive Electric

## Agriculture

- Urban agriculture on vacant public lots
- IATP
- REAP (road energy assistance program)
- General Mills and Cargill

## Manufacturing/supply chain

- Labor unions
- Made in MN database
- Building Clean – energy efficiency products. Buildingclean.org
- Supply chain databases and maps – transportation, wind, solar
- Mn sustainable growth coalition

## Utilities

- Solar rewards solar sense “dollar incentives”
- Xcel’s solar rewards program/in general: not metering/solar option in metro
- Public Utilities Regulatory Policies Act (PURPA)
- Regulatory enforcement (e.g. Red Lake Falls Community Hybrid)
- “partners in Energy” w/Xcel energy
- community solar “program”/option

## Conservation/natural resources

- Adopt a river
- Young adult program (CCMI) conservation corps MN +IA
- Superior Nat’l Forest “Faces of Tomorrow”
- Green infrastructure development (MWNO)

## Community enterprise

- North Minneapolis Low income CSG 1) community solar garden
- Multipurpose training facility
- Community conservation teams (policy AND local projects) w/conservation MN

## Training/Workforce Development

- Just solar workforce (MN IPL)
- Water-focused professional training
- Multi-purpose training facility

## Youth development

- Urban scholar program
- Step up program
- Just B solar camps
- Youth outdoors (CCMI) conservation Groups MN + IA
- Minnesota River green team
- FFA (future farmers of America)
- Urban wilderness canoe adventures
- Green STEM Jobs Fall 17-18 school year climate gen
- YEA!MN

## Education

- Climate conservations/faith communities
- Edison/schools solar projects
- Green Ribbon schools awards
- Academic standards
- 21st century after school
- STEM integration
- Informal and formal education sparks
- K-12 wind and solar online resources
- Hands on renewable energy kits and curriculum
- Teacher training
- Climate community convening rural MN

## Multi-sector programs and initiatives

- Taking MN solar models to Illinois
- Green infrastructure charrettes/matrix of performance values
- LEED leadership in Energy and Environmental design
- Living building challenge (architecture 2030)
- Green Step Cities

## Environmental Justice

- Green Zones
- Just Solar Coalition
- Community outreach and partners
- Clean energy equity table

## Government

- Met council’s comprehensive planning’s emphasis on energy and climate resilience (AND smart growth)
- Emerging Entrepreneur loan fund
- Master contract for small scale solar
- Revolving fund
- Minneapolis clean energy partnership
- Prior work – Green jobs task force 2009
- Made in MN solar incentive
- Climate planning: climate solutions + econ opps/(CSEO) and 2025 project
- Green teams
- Fleet management
- City of Minneapolis clean energy franchise fee
- Energy vision advisory committee workforce dev work group