

Prospects and Practice in Green Economic Development



Karl F. Seidman

MIT Department of Urban
Studies and Planning

Increasing Attention to Green Economic Development

- Concern over global warming
 - City and community sustainability plans
- Obama administration & ARRA initiatives
 - Energy efficiency and renewable energy as vehicles for energy and economic development policy
- City green economic development initiatives (Fitzgerald 2010)

Defining

Green Economic Development

- Extend definition from Chapple 2005
 - “not just...clean energy, but also technologies that allow cleaner production processes, as well as the growing market for products that consume less energy...”
- Two components
 - Adapt existing business products and processes to reduce environment impacts
 - Develop new technologies, products and services to address environmental markets and mandates

Research Focus

- Economic development organizations (EDO)—a mediating factor in adoption of green practices & pursuit of green markets
 - Intermediaries that deliver information and resources to firms
 - Address market imperfections and barriers
- To what extent and how are EDOs embracing green economic development?
- What resources are they using to implement new programs and services? What challenges do they face?

Results in Brief

- Approximately half of EDOs are adopting new green services
- Most are extending existing services and competencies to include green business issues
- A small sets of EDOs are providing more comprehensive services
- Reallocation of existing \$, federal/state grants most common source of funding
- Key challenges are a gap in EDO expertise and limited business demand

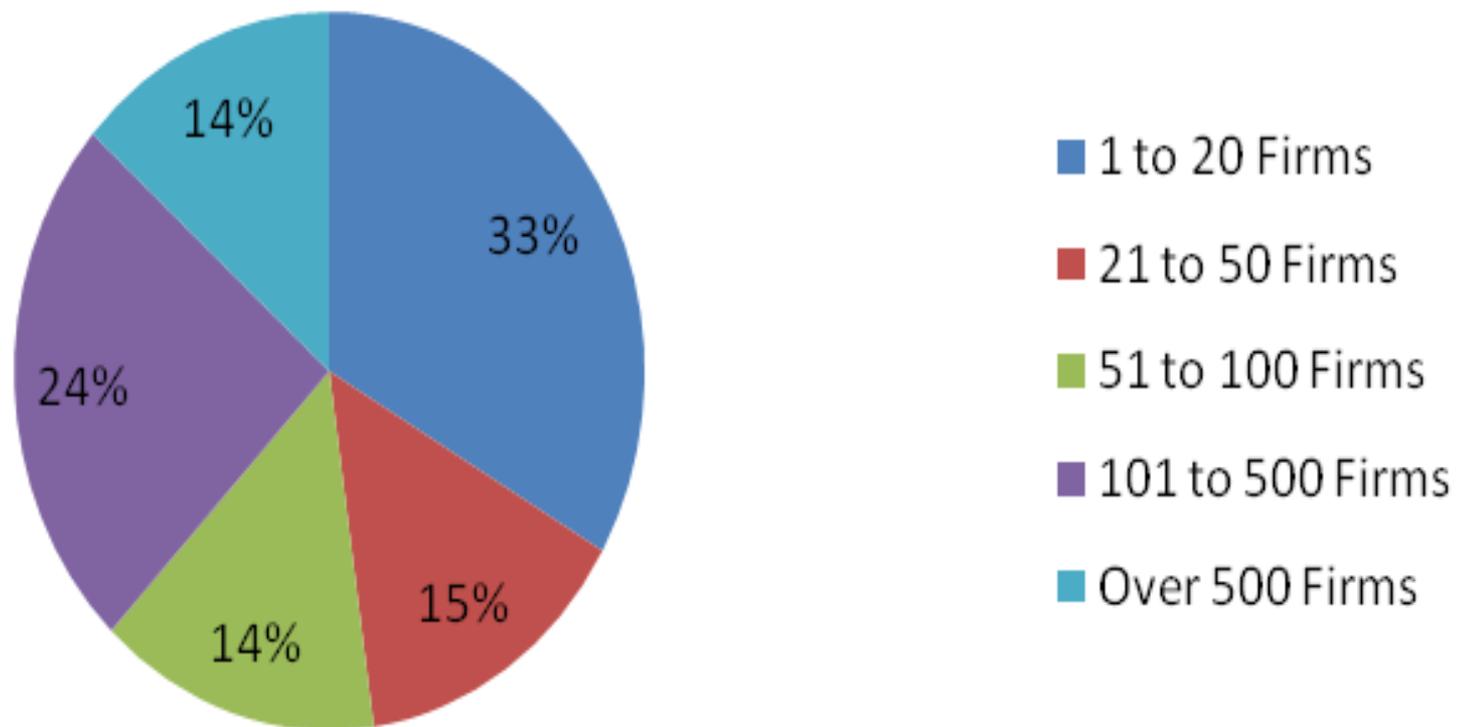
Three Phase Research Methodology

1. Survey of economic development organizations—January to April 2010
2. Interviews with 15 EDOs that expanded into green ED— April to May 2010
 - Motivation for new programs
 - How EDOs designed & implemented new programs
 - Required funding and expertise
3. SBDC survey in summer 2010
 - Better understand how one type of EDO is addressing green economic development

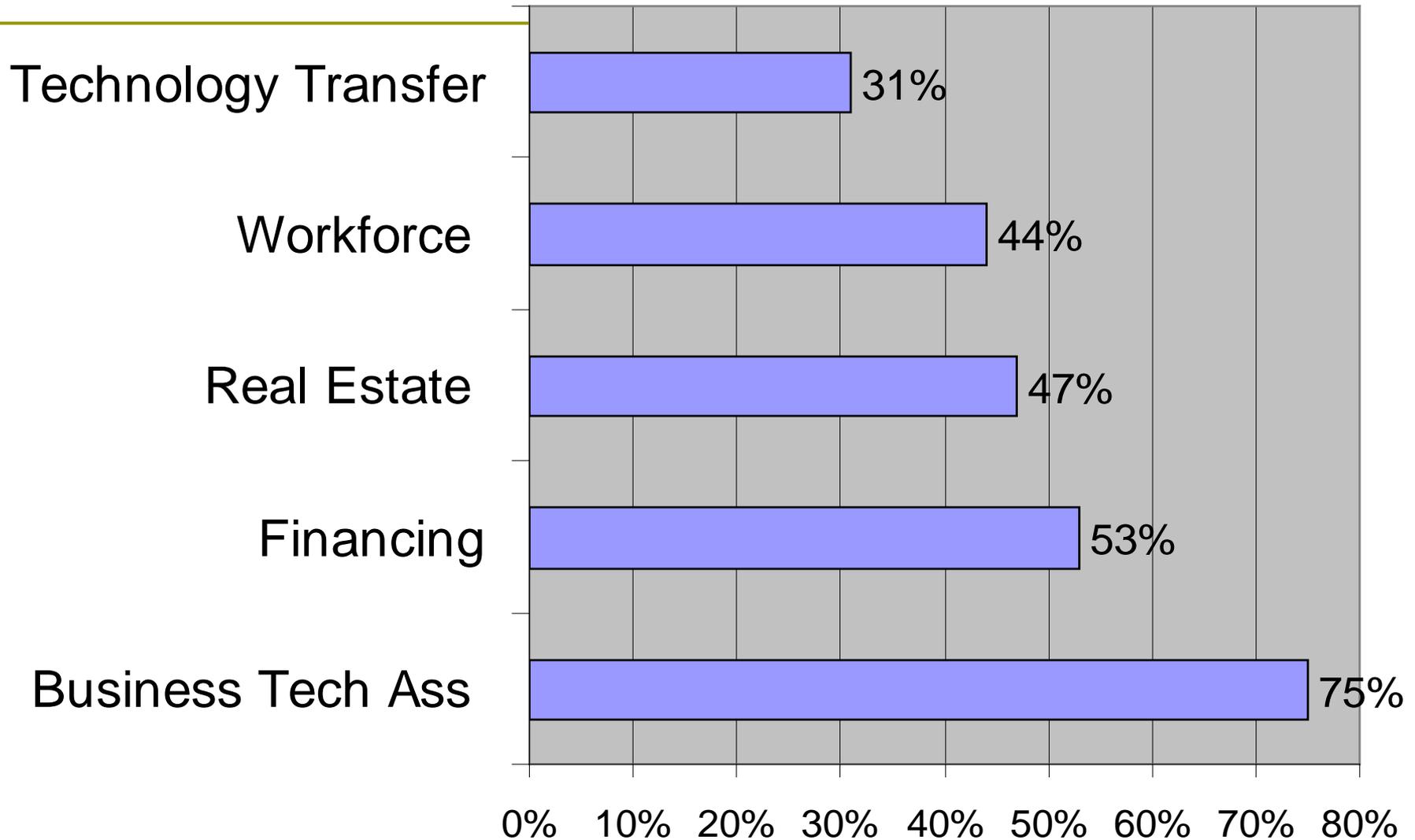
EDO Survey Respondents

- 159 respondents with 105 full responses
 - Primarily local ED agencies (46%) and non-profit ED corporations (25%)
 - Business training/technical assistance and financing were most common EDO services
 - One-third assist \leq 20 firms and 38% assist over 100 businesses per year
- Small sample size and selection bias issues indicate research is more exploratory than representative of field

Figure 1. Annual Number of Firms Served by Respondents



Services Provided by Respondents



EDO Survey and Green Services

- EDOs cite modest demand for green services
 - Vast majority reported no or less than 25% of their business clients seeking assistance
 - Greatest demand for energy efficiency and renewable energy
- Half of respondents added green ED activities in 2009
 - 51% added services to “green” existing processes
 - 48% added services to help firms enter new green markets

Percent Adding Different Services

Type of Service	% Adding to Green Firms	% Adding to Enter Markets
Training	62%	56%
Tech Assistance	57%	50%
Finance-Loans	51%	43%
Finance-Grants	38%	43%
Finance-Tax Credits	30%	30%
Training-Incumbent	40%	38%
Training-New Workers	44%	39%
Hiring/Placement	30%	23%
LEED Buildings	19%	14%

EDO Survey and Funding

Source	% Using to Green Firms	% Using to Enter Markets
Reallocate \$	70%	59%
Fees for Services	28%	29%
Fed: non-ARRA	40%	36%
Fed-ARRA	53%	44%
State Govt.	50%	56%
Local Govt.	30%	32%
Foundation	14%	21%
Other Private	23%	29%

Interviews with Green EDOs

- Three paths to implementing green ED initiatives
 - Implemented as part of a prior plan
 - Internal staff initiative
 - Response to a funding opportunity
- Use of standard ED tools
 - Business incubators, revolving loans funds, calling programs, etc.
 - Refocusing existing services on green issues
 - Most initiatives modest in scale and scope

Interviews with Green EDOs

- Research and planning for new services
 - Analysis of business and industry needs
 - Reviewing other programs and best practices
 - Research into funding sources and their regulations
 - Most EDOS relied on internal staff for research
- Implementation Challenges
 - Limited business demand cited in most cases
 - Securing financing for business
 - Gaining required new expertise

SBDCs and Green Economic Development

- SBA and state-funded small business technical program present in every state
- Staff and budgets vary by state but all are well established programs
 - Budgets: range \$1 to \$12 million;
 - Staff: varies from 8 to 200
- High survey response: 49 responses with 43 states, Puerto Rico and Virgin Islands

SBDCs and Green Economic Development

- ❑ 75% of SBDC networks provide at least one green service
- ❑ Over half provide services in 5 of 9 categories
- ❑ Largest share of SBDCs helping firms assess green market opportunities
- ❑ Also active in energy and resource efficiency
- ❑ In each category, > 40% of SBDC networks do not provide services

Type of Service	% Technical Ass.	% Training
Energy efficiency	51%	41%
Reducing non-energy resources	55%	39%
Recycling	53%	33%
Renewable energy	39%	22%
Green buildings	31%	18%
Green certification	29%	16%
Redesign products	29%	16%
Analyze/serve new energy markets	57%	37%
Analyze/serve other new environ. markets	55%	37%

SBDCs and Green Economic Development

- Most SBDCs offered green services before 2008
- Most growth in green services in 3 areas:
 - Making energy efficiency improvements (33%)
 - Analyzing/entering new energy markets (37%)
 - Analyzing/entering other env. markets (39%)
- SBDCs cite funding and limited business demand as key implementation challenges
- New staff and partnerships used to gain needed expertise

SBDC Funding of New Services

Source	Number Receiving	Total Funds Received	Average Amount
Federal Govt.	13	\$1,849,000	\$184,900
State Govt.	10	\$778,000	\$111,143
Reallocate	9	\$548,000	\$91,333
Fees	5	\$85,000	\$21,250
Local Govt.	4	\$290,000	\$91,667

Findings and Observations

- ❑ Many EDOs are expanding into green economic development
- ❑ A large part of the field is not embracing a green agenda (25% to 50%)
- ❑ Most local government efforts from this survey are small in scale and scope
- ❑ New initiatives tend to mirror existing services and capacities
- ❑ New expertise and more rigorous analysis needed to support green ED efforts

Findings and Observations

- Practitioner leadership an important factor in EDOs moving into green ED
- Funding was not a major barrier to new services, partly due to their limited scope
- Business demand a critical challenge
 - Research to better understand reasons for limited business demand
 - Can “mainstreaming” green services help overcome a lack of demand?
- EDOs not currently positioned to be a major force in addressing climate change