

# EFFICIENCY CITIES NETWORK

July 21, 2009

3pm EDT

**Function and role of the coordinating entity**

**Moderators:**

Joel Rogers, Director of Center on Wisconsin Strategy (COWS)

Satya Rhodes-Conway, Administrator of Efficiency Cities Network (ECN)

# Agenda

- Welcome and intro (5 min)
- Presenters (30 min)
  - Steve Burrington, Serrafix
  - Steve Morgan, Clean Energy Solutions
  - Blair Hamilton, Vermont Energy Investment Corporation
  - Cal Broomhead, City of San Francisco
- Questions and discussion (50 min)
- Next calls
  - Tuesday August 4, 3 PM EDT, Measurement
  - Tuesday August 18, 3PM EDT, Certifying auditors and contractors - TENTATIVE

# Role and Functions of a City Energy Efficiency Entity

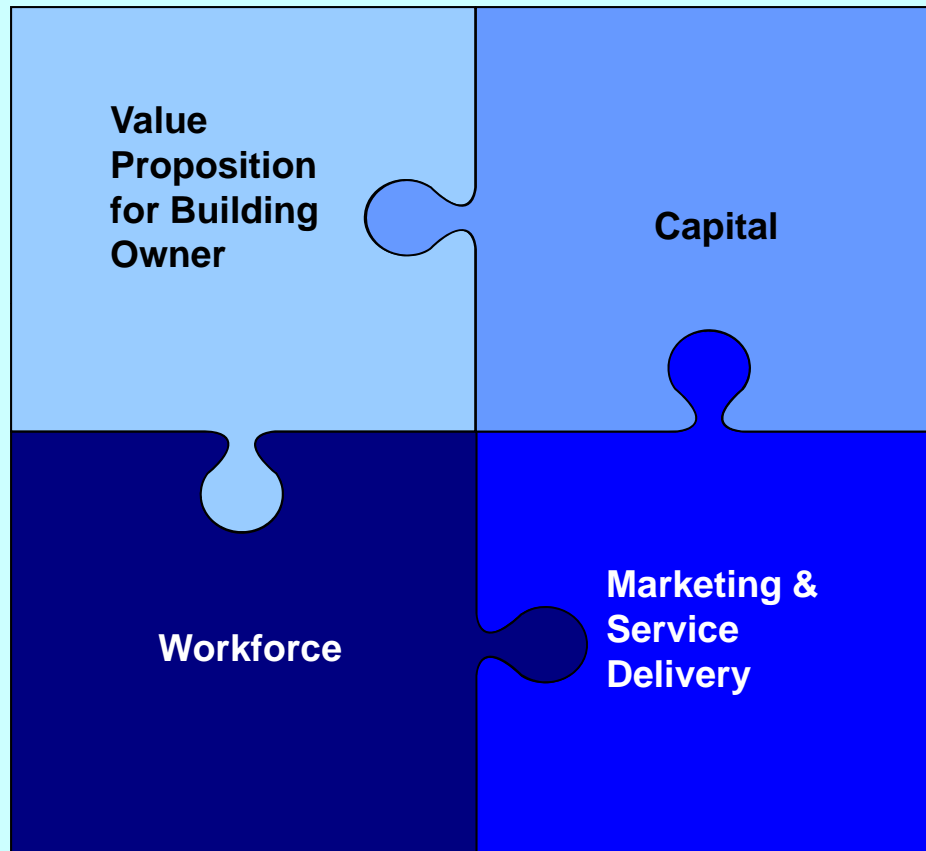
Efficiency Cities Network  
July 21, 2009

Stephen H. Burrington  
Principal  
Serrafix



SERRAFIX

# Context for the City Role: Elements of the Efficiency Solution



*(Thanks to NRDC for graphic concept)*

- **Value Proposition:** Demand for efficiency must exist – benefits to owner need to justify investment and transaction costs
- **Capital:** Financing solutions that enable owners to pay as energy savings accrue will have greatest impact
- **Marketing & Service Delivery:** Must be effective and efficient at meeting needs of owners and lenders
- **Workforce:** More trained workers are needed to meet growing demand for quality energy services

# Institutional Structure and Capacities: General Observations

- No one-size-fits-all institutional model exists
- Within any structure, all roles to be discussed here must be performed
- Most structures will involve
  - Core entity for strategy development and execution, high-level management, accessing financial resources -- usually a non-profit with consultant support
  - Governance and partnership relationships involving key entities
    - carefully designed
  - Network of qualified firms to deliver services
- Given past calls on capital and workforce issues, this presentation will focus on roles/functions in other areas

# City Energy Efficiency Role: Strengthen Value Proposition

- Simple but important fact: building owners are “the deciders”
  - Many don’t consider efficiency to be worth it
  - Reasons include transaction costs, opportunity costs, reluctance to borrow, skepticism about savings projections
- “Early adopter” owners can help launch, but serious market penetration requires improving the value proposition
- City role must involve *more than*
  - Finance to eliminate up-front cost and ensure positive cash flow impact
  - Marketing and “one-stop” service delivery
- Value proposition can be strengthened by
  - Better access to particularly rich existing resources -- e.g.,
    - Utility incentives in CA or MA (Green Communities Act)
    - Regional Greenhouse Gas Initiative auction revenues
  - Creating additional incentives -- e.g., initially with ARRA sources
  - Strategies to fix split incentives – e.g., with energy efficient leases
  - Mandate -- e.g., proposed NYC audit and retrofit requirement
- Particular City functions depend on which of these are determined to be the best strategies

# City Energy Efficiency Role: Marketing

- Basic elements include
  - Broad-based strategies (advertising, social marketing, etc.) – see other presenters for best practices
  - Building owner outreach, inc. initial assessment, that conveys
    - Credibility of expert, independent non-profit entity
    - Confidence that transaction costs will be low due to “one-stop” service
    - Reliability of savings estimates and contracting quality
  - Aggregation of early project activity through high-level targeting of key sectors, institutions, associations
- Assume building owners will commit resources only if persuaded
  - Demand for efficiency is growing but barriers are not going away
- Priority marketing functions depend on identification of sectors to be targeted as early opportunities

# City Energy Efficiency Role: Service Delivery

- Program design must
  - Adopt best practices in auditing, project planning and oversight, quality assurance, measurement and verification, *but*
  - Avoid becoming bureaucratic and inefficient
- Note: Generally accepted protocols must be developed for special assessment districts to ensure that owners will realize net cost savings
- Basic services -- performed through qualified contractors:
  - Building benchmarking, assessment and audits
  - Selection of appropriate eligible measures
  - Qualification of contractors
  - Commissioning
  - Measurement and verification (and documentation)
  - Dispute resolution
  - Financing and access to incentives
- All cities should contemplate using multiple contractor types: ESCOs, building contractors, efficiency program administration firms, other
  - Marketplace is evolving – firms specializing in building energy performance and purporting to offer comprehensive services are proliferating



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# **Structures to Deliver Building Retrofits**

## **Efficiency Cities Network**

**July 21, 2009**



# New Non-Profit Entity to Coordinate/Implement Building Energy Retrofits

## 1. A new non-profit can (and should) be established with clear, highly-focused mission to meet specified needs

- Dedicated to specific geographic area
- Dedicated to specific markets (e.g., municipal facilities, affordable housing, residential, institutional, etc.)
- Provides built-in mission alignment, which is a key to success. No conflicting objectives.



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# New Non-Profit Entity to Coordinate/Implement Building Energy Retrofits

## 2. Consider “pay for performance” structure to maximize real results

- Contract for results, not good intentions
- Provide and structure financial incentives to assure accountability
- Specify metrics and goals (energy savings, NPV of economic benefits, market penetration, etc.)
- Requires multi-year period to implement



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# New Non-Profit Entity to Coordinate/Implement Building Energy Retrofits

## **3. Recruit qualified staff that are highly motivated by mission**

- Skills determined by specific focus, but will tend to be high-level
- Consider staffing to provide, in-house, one-stop full portfolio of required services (technical analysis, packaging, project development, financing, construction management, quality assurance)



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# New Non-Profit Entity to Coordinate/Implement Building Energy Retrofits

## 4. Consider potential to operate as a non-profit Energy Services Company (ESCO)

- Serve niche opportunities not served by large national ESCOs
- Contract to guarantee savings or make contract payments for savings
- Some risk - requires financial backing

# Thank You!

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**Policy Director**  
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# Energy Retrofit Program Organization

Emerald Cities, 7-21-09

Cal Broomhead

City of San Francisco

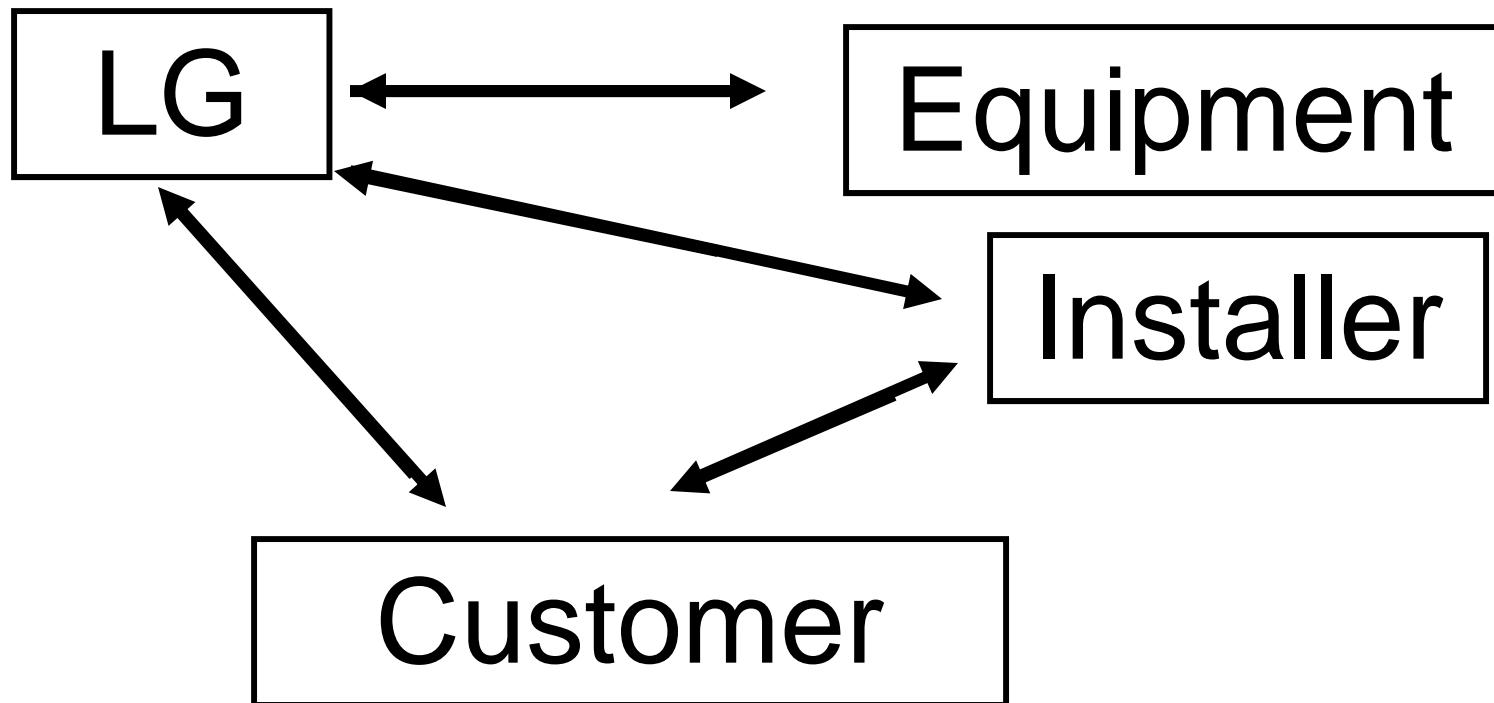


One LG?

Many LGs?

- MOU's with each other and Funder
- MOU's with One LG as Primary
- Legal Entity (Joint Powers Authority)

## Relationships: reward and risk



# Using Contractor/s

LG

by function and/or by sector

Prime  
Contractor

Contractor

Contractor

Contractor

Sub

Sub

Sub

# Functions

- Technology & Standards
- Installer Recruitment
- Training
- Marketing
- Tracking (data)
- Audits
- Finance
- Sales
- Installation
- Incentive Payment
- Quality Control
- Evaluation (EM&V)

San Francisco Dept of Environment

Prime Contractor

Sub

Sub

Installer

Installer

Installer ...

Installer

Installer

Installer ...

Customers

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# Potential ECN topics:

- Determining metrics for success
- Certifying auditors and contractors
- Overcoming the split incentive and reaching renters
- Working with utilities
- Efficiency Labeling - disclosing energy costs at sale or lease
- Opportunities in nonresidential properties
- Contracts
- Determining measures and payback times
- Structure of municipal bonds
- Point of Sale ordinances
- Aggregating properties to achieve scale
- Model training programs and curriculum
- Coordinating purchasing, and applying technology

# Contact Information

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Presenters:

- Clean Energy Solutions – [www.cleanenergysol.com](http://www.cleanenergysol.com)
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- City of San Francisco - [www.sfenvironment.org](http://www.sfenvironment.org)
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