

# ***SustainableWorks***

Quality Jobs for a Healthy Environment

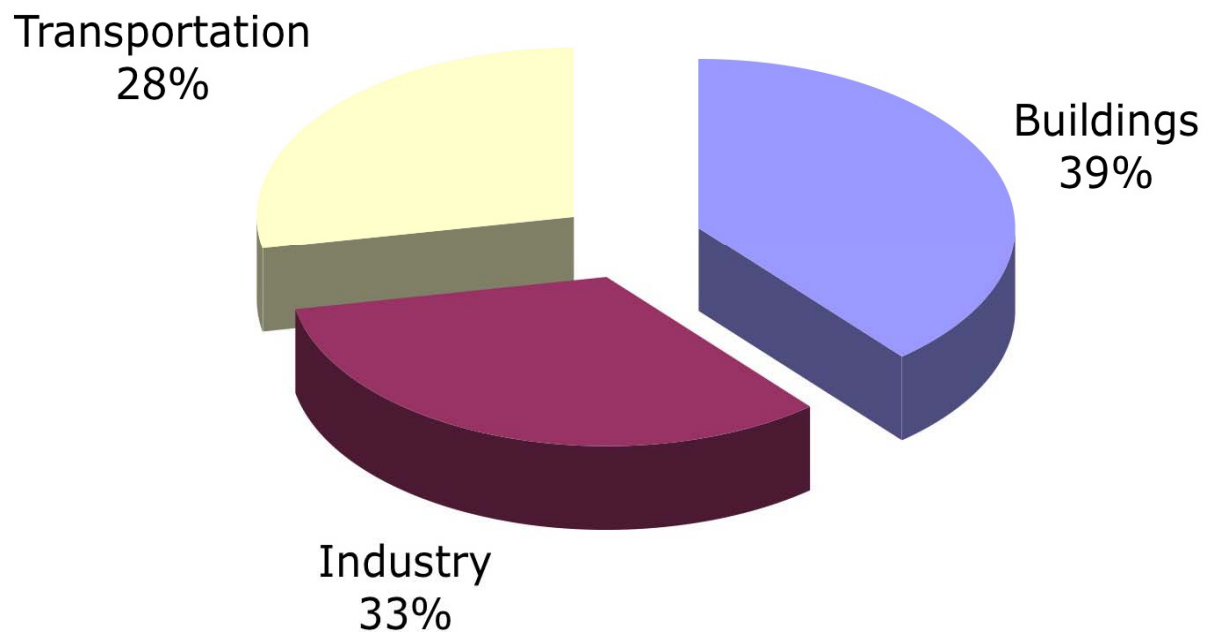
Creating Quality Jobs  
Reducing Energy Costs  
Addressing Climate Change

## ***Retrofits of Residential & Light Commercial Buildings***

*Industrial Areas Foundation - Northwest*

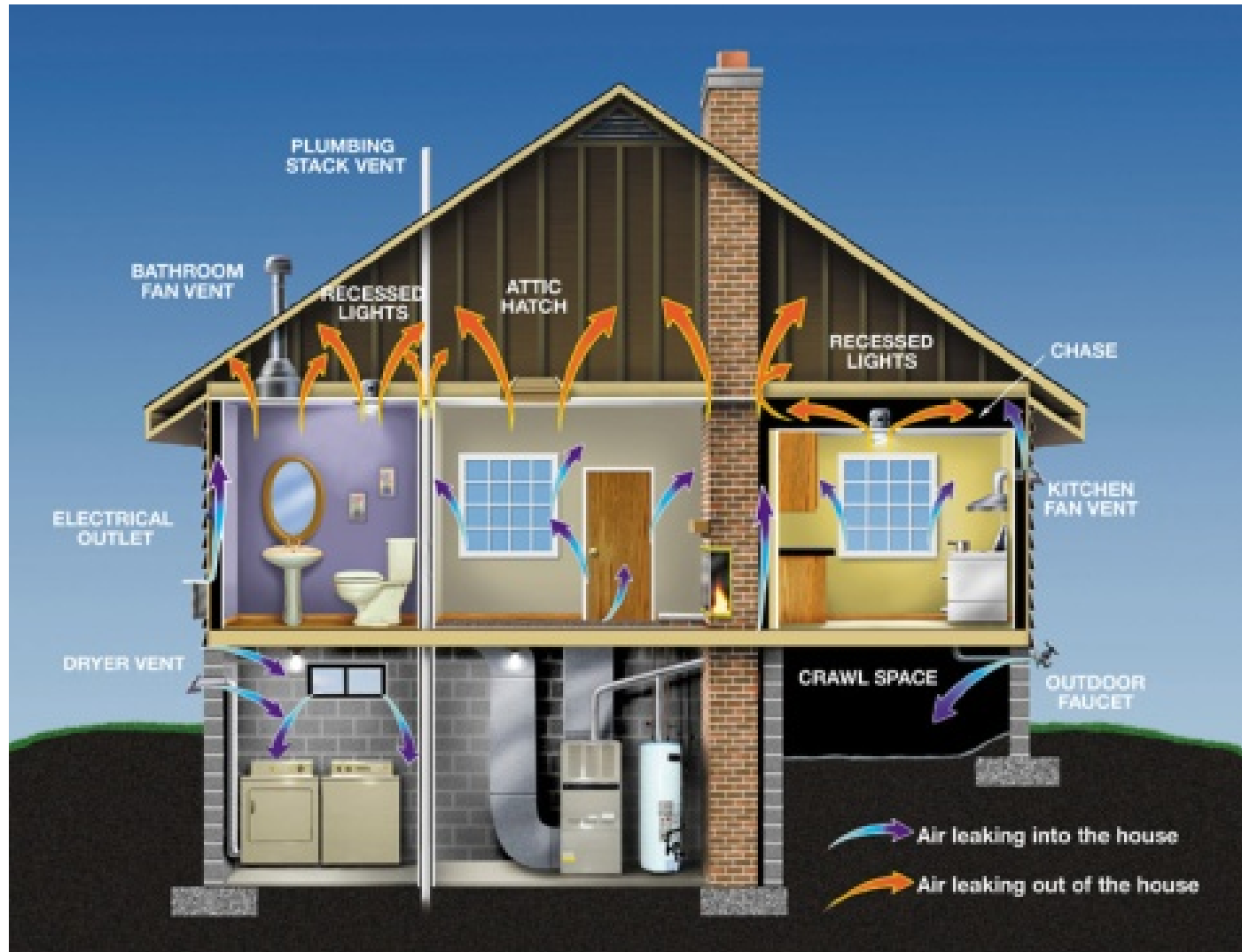
# Buildings account for nearly 40% of all energy consumption – more than transportation

**Figure 2: Buildings and Industry Consume More Energy than Transportation**



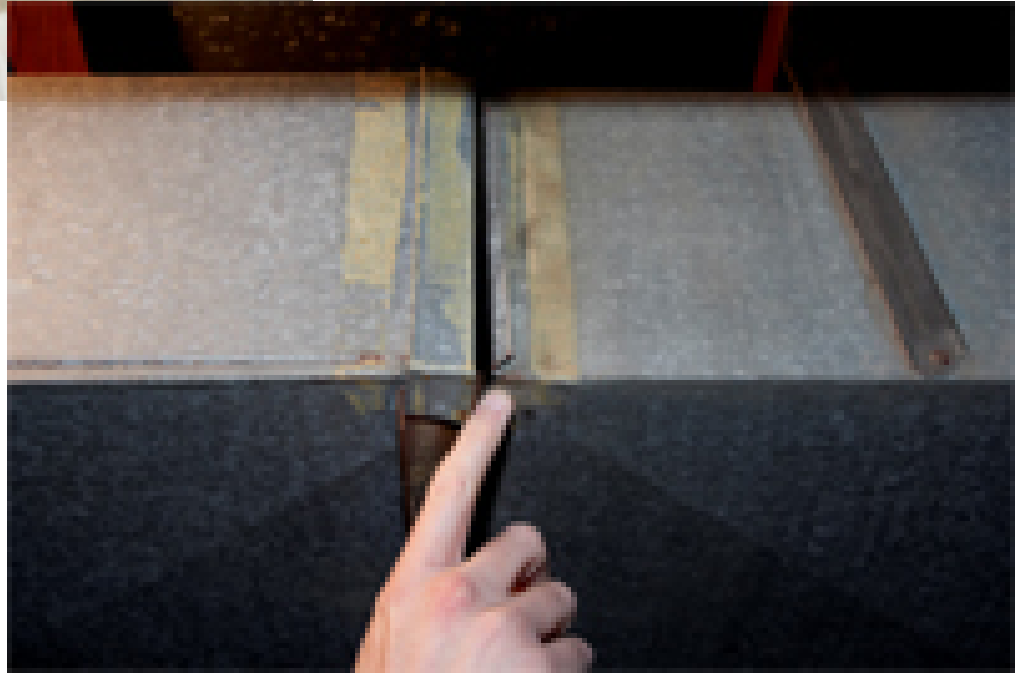
Source: US Energy Information

# Most of this energy is wasted!



# Potential Measures

- Insulation (ceiling/attic, duct, floor, wall)
- Heat pumps
- Duct sealing / pipe wrapping
- Lighting
- Furnace replacement
- Windows
- Water heater replacement
- Doors
- Appliance swaps
- Caulking / Weather stripping
- Solar panels & water heater
- Water conservation
- Other







# This is already starting in Spokane!

- Spokane Alliance has an initiative called “*Sustainable Works*” that organized a loan fund for doing energy efficiency retrofits on non-profit, religious, and small commercial buildings.



## CENTERPOINT RETROFIT

This outline describes energy saving measures underway at Centerpoint which is a facility serving developmentally disabled individuals.

### I. Current utility bills

- A. Total annual electric : \$ 5,611.83
- B. Total annual gas : \$13,366.26
- C. Total annual utilities : \$ 18,978.09

### II. First energy saving measure

- A. Add ceiling insulation to the R-30 level
- B. Annual Electric savings 4,833 KWh - Annual gas savings 1,952 therms
- C. Annual cost savings \$2,750

### III. Second energy saving measure

- A. Replace two rooftop units, add economizers to two existing units, and control outdoor air intake to all four units with CO2 sensors
- B. Annual Electric savings 12,910 Kwh - Annual gas savings 1,610 therms
- C. Annual cost savings \$3,200

### IV. Carbon reductions

- A. Annual Electric reduction 17,743 Kwh x .2 = 3,548 lbs. Less carbon
- B. Annual gas reduction 3,562 therms x 12 = 42,744 lbs. Less carbon
- C. Annual carbon reduction 46,292 lbs.

### V. Job costs and incentives

- A. Insulation- \$15,310 minus \$4,330 utility incentive = \$10,980
- B. HVAC upgrade- \$20,522 minus \$5,574 utility incentive = \$14,948
- C. Total cost after incentive = \$25,928

**Conclusion:** This job pays for itself in 4.36 years , reduces utility bills \$5,950 annually, and reduces carbon emissions by 46,292 lbs. annually.

# Spokane SustainableWorks

- achieved significant savings & deepened retrofits through:
  - contractor coordination
  - purchasing oversight
  - cross training of workforce
  - quality audits & project oversight
  - oversight of incentives
- demonstrated cost-effectiveness while paying prevailing wages & benefits

***Systems Training  
&  
Trade Coordination***



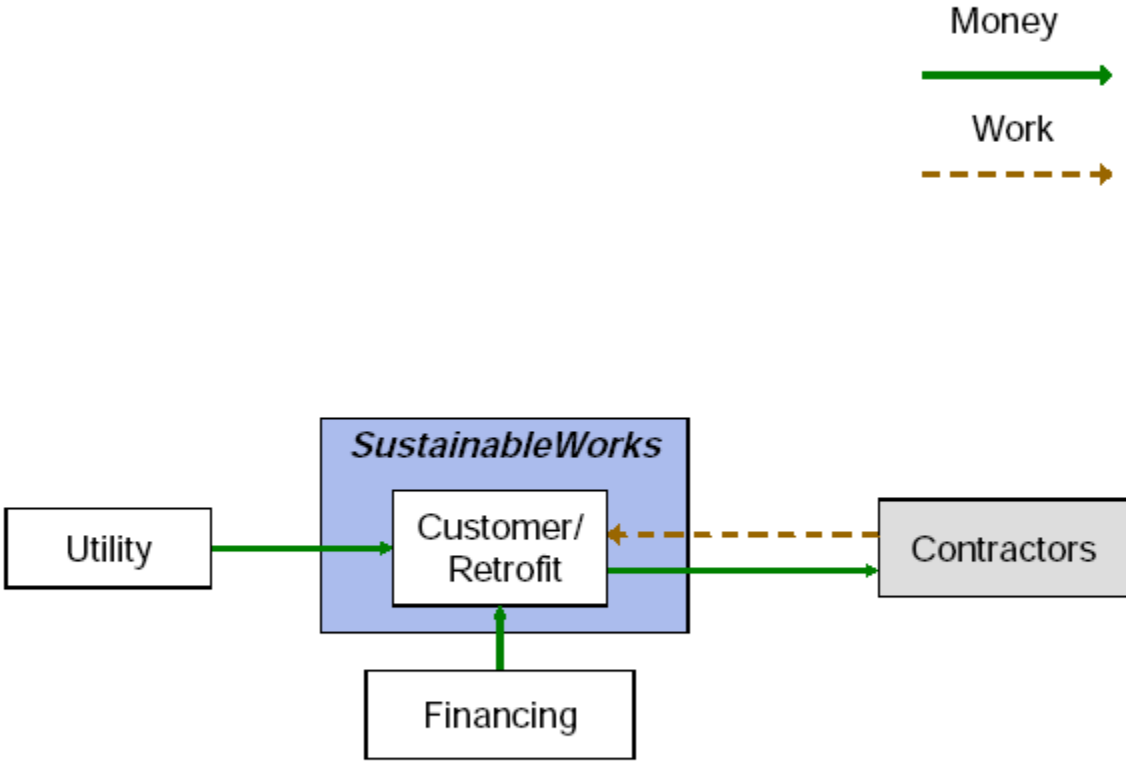




# Taking It to Scale: Customer Barriers

- secure an audit
- arrange financing
- select trustworthy contractors
- coordinate and oversee the contractors work
- secure utility rebates or incentives

*SustainableWorks*  
Quality Jobs for a Healthy Environment



Taking It To Scale:

Expanding  
SustainableWorks

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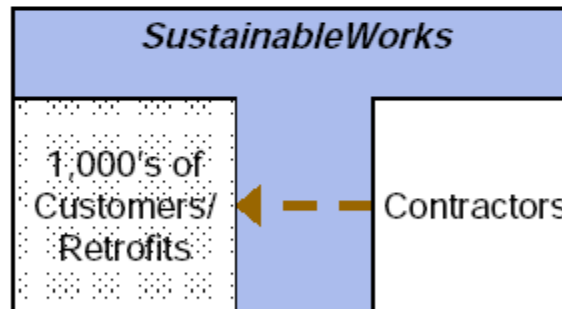


1,000's of  
Customers/  
Retrofits

Contractors

**IAF Northwest**  
Metropolitan Alliance for Common Good \*\* Sound Alliance \*\* Spokane Alliance \*\* Greater Edmonton Alliance

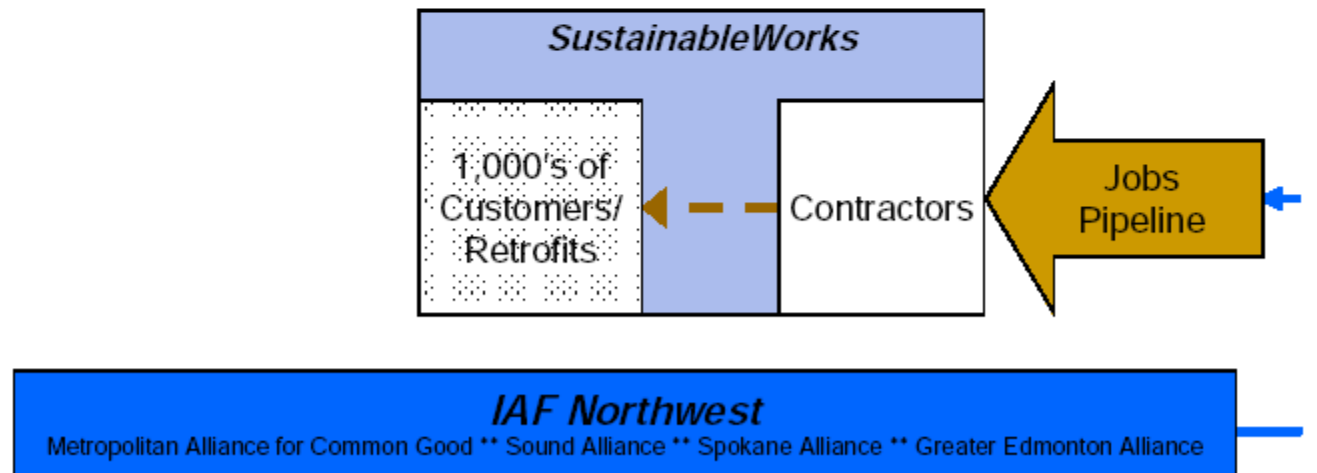
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# Insuring Quality Jobs & Other Social Benefits

- pay prevailing wages and provide health and pension benefits;
- utilize apprentices at 15 – 25 %;
- hire and/or accept apprentices from underserved communities that come out of qualified pre-apprenticeship programs.

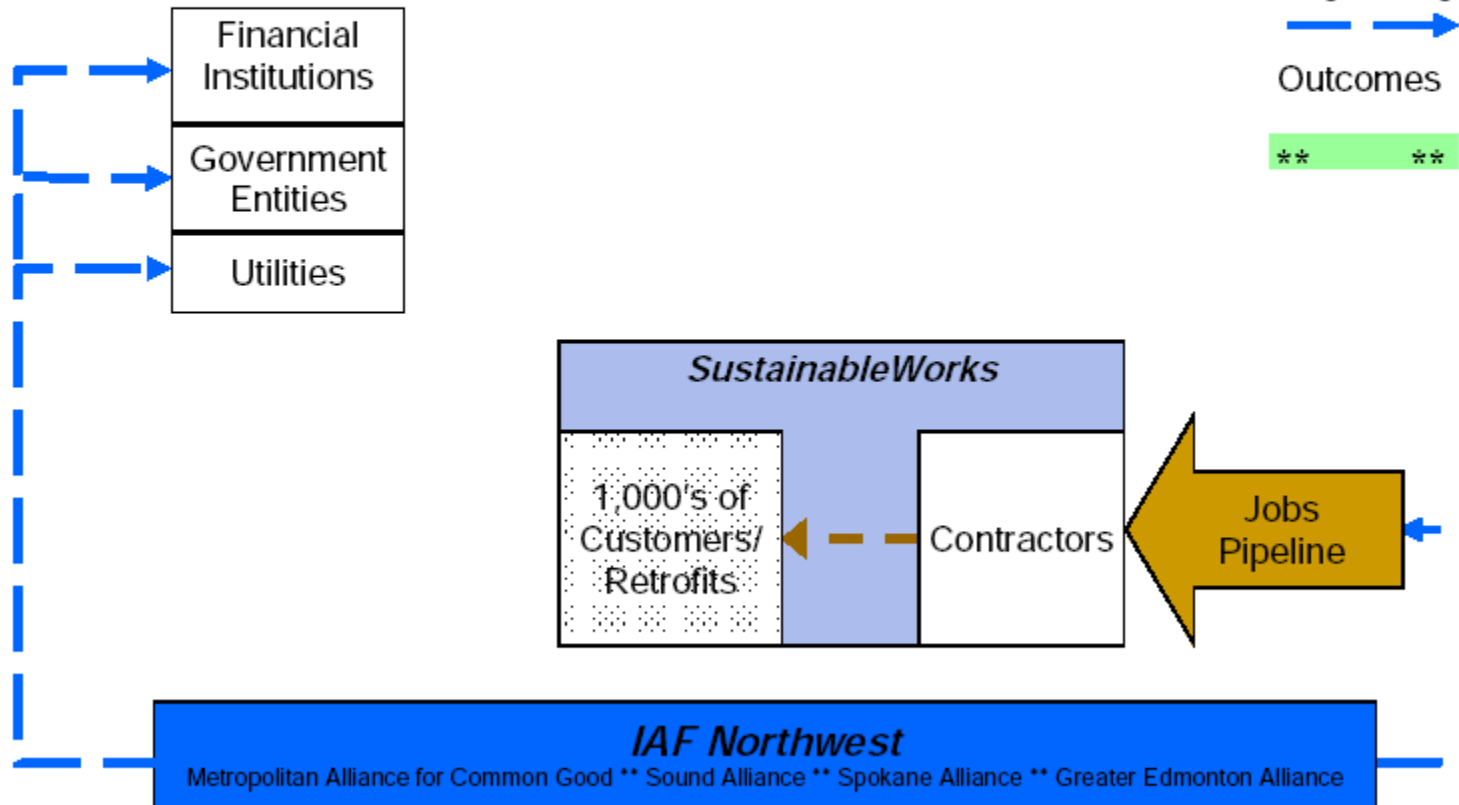
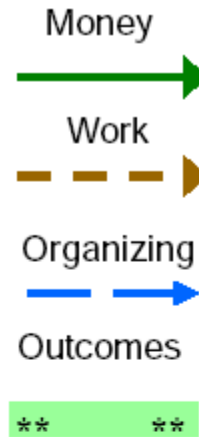
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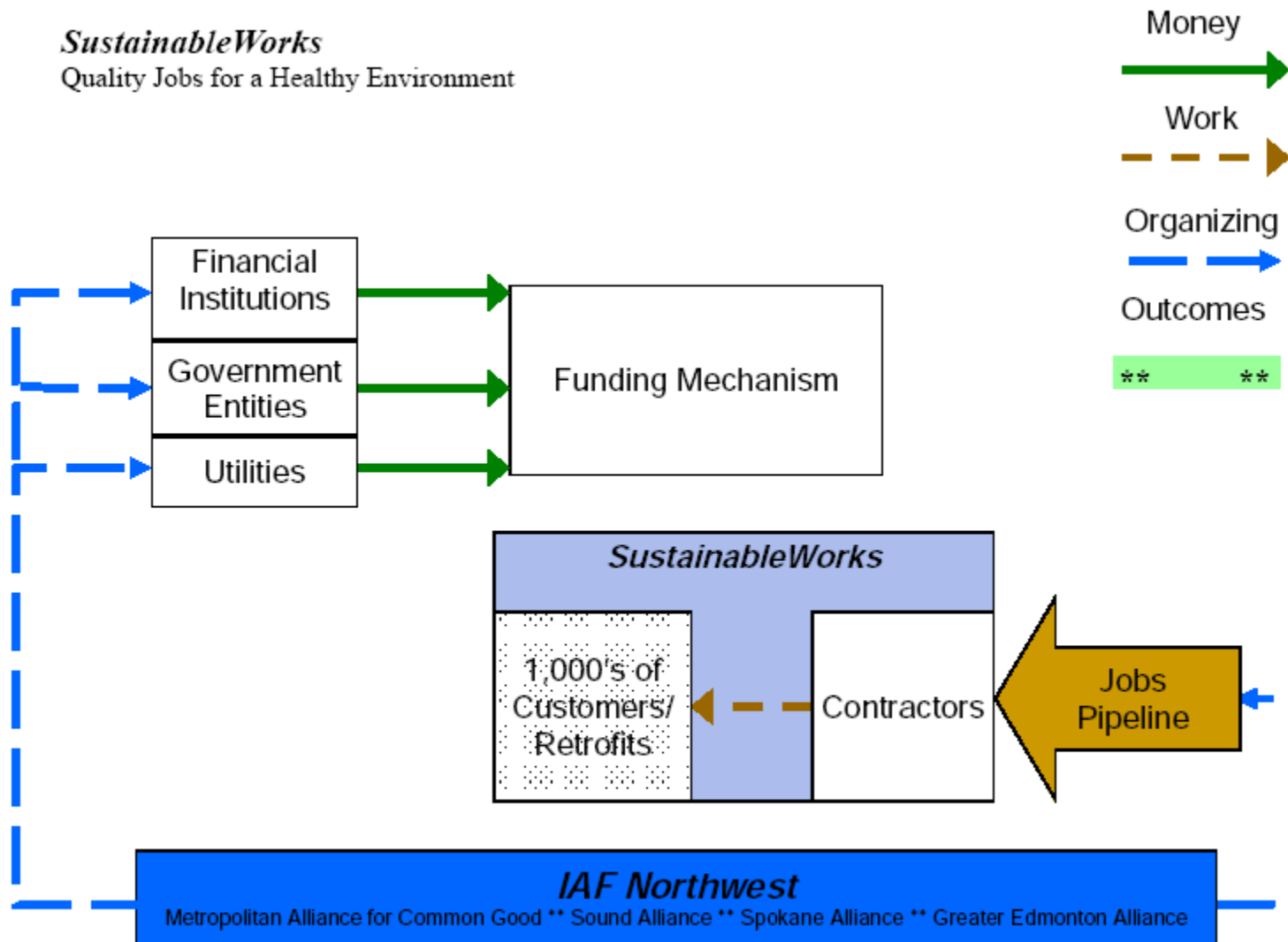
# Taking It to Scale: Organizing Commitments

- blend multiple utility, government, charitable and consumer investments to meet conservation and climate change objectives;
- further reduce costs through:
  - bulk purchasing
  - lower mobilization costs
  - well trained & coordinated workforce
  - lowering entry / participation barriers
- reduce customer barriers

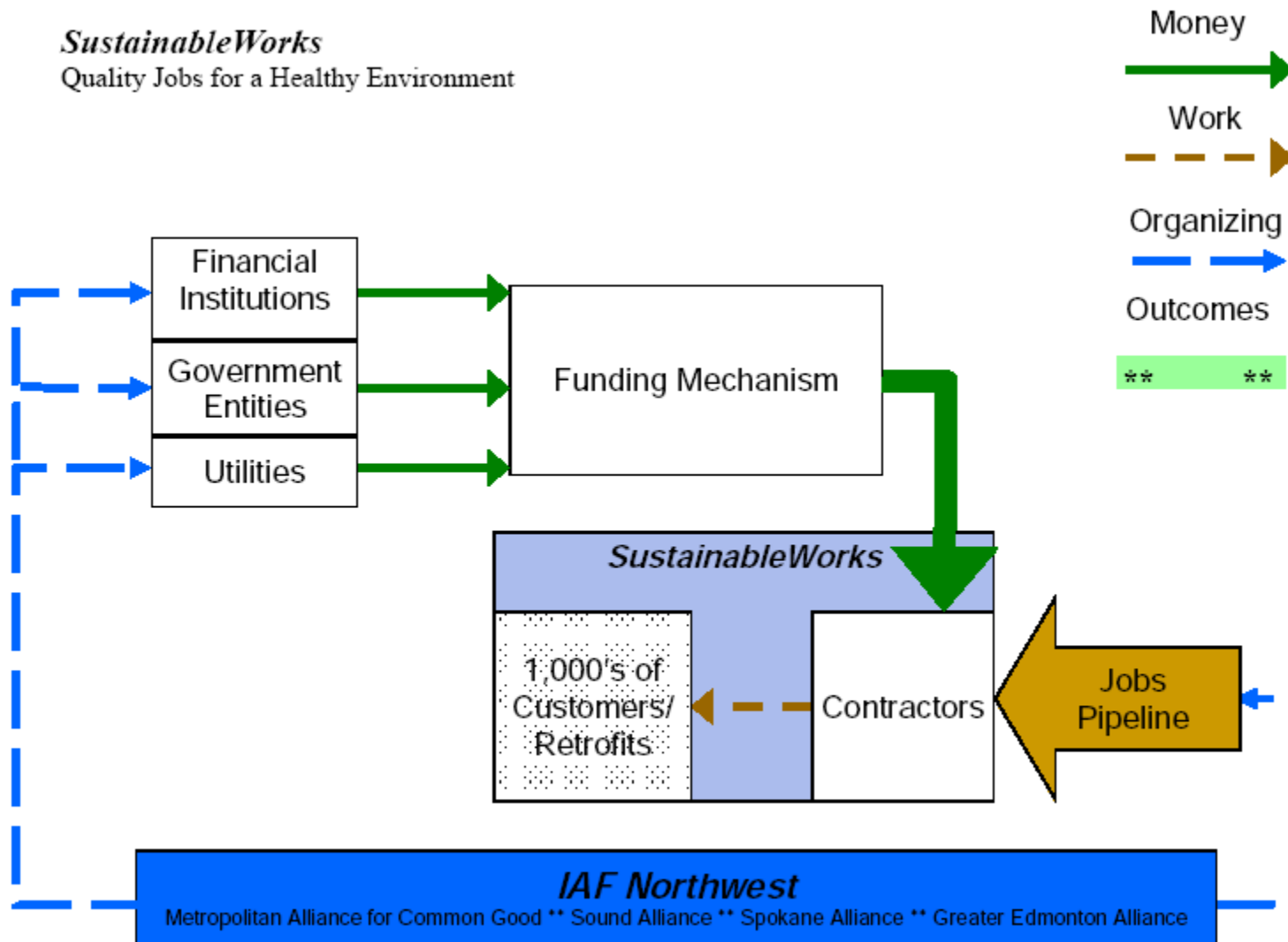
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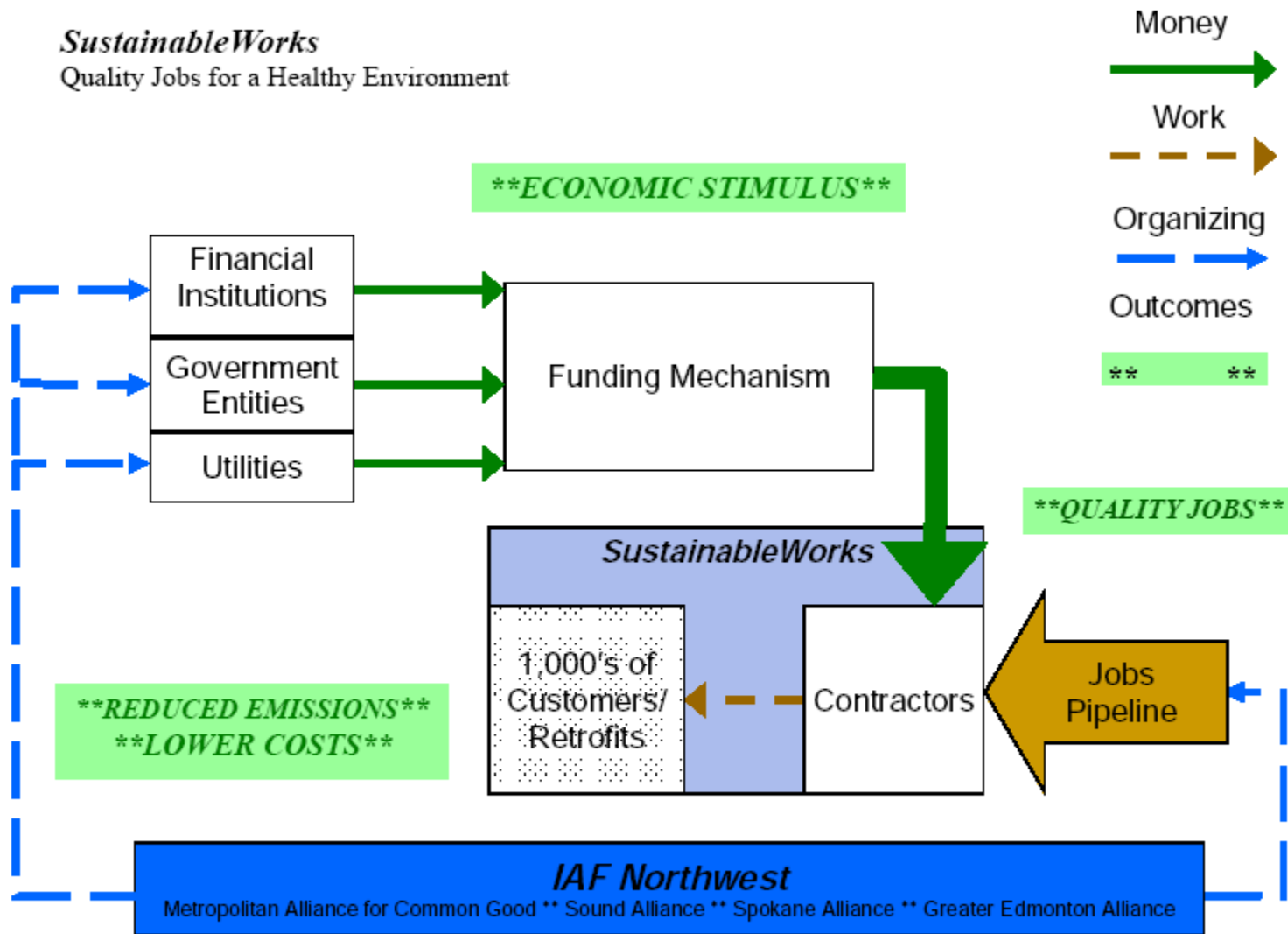
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