

# Location Trends of Today's Thriving Industries

*Presented by:*

EconomicDevelopmentOnline



**FOOTE**

CONSULTING  
GROUP, LLC

# Only 25 Slides...Promise!



# About FCG

- Site selection, economic development, real estate & workforce consulting company
- Founded by Deane Foote, CEcD
  - 30+ years development experience
  - Worked for Jacobs Carter-Burgess, Paragon Decision Resources, Fantus, Urbana-Champaign (IL) EDC
  - Worked on site selection projects that created over 5,000 jobs & \$900 million in capital investment in recent years
  - Completed many successful economic development plans that have created jobs.

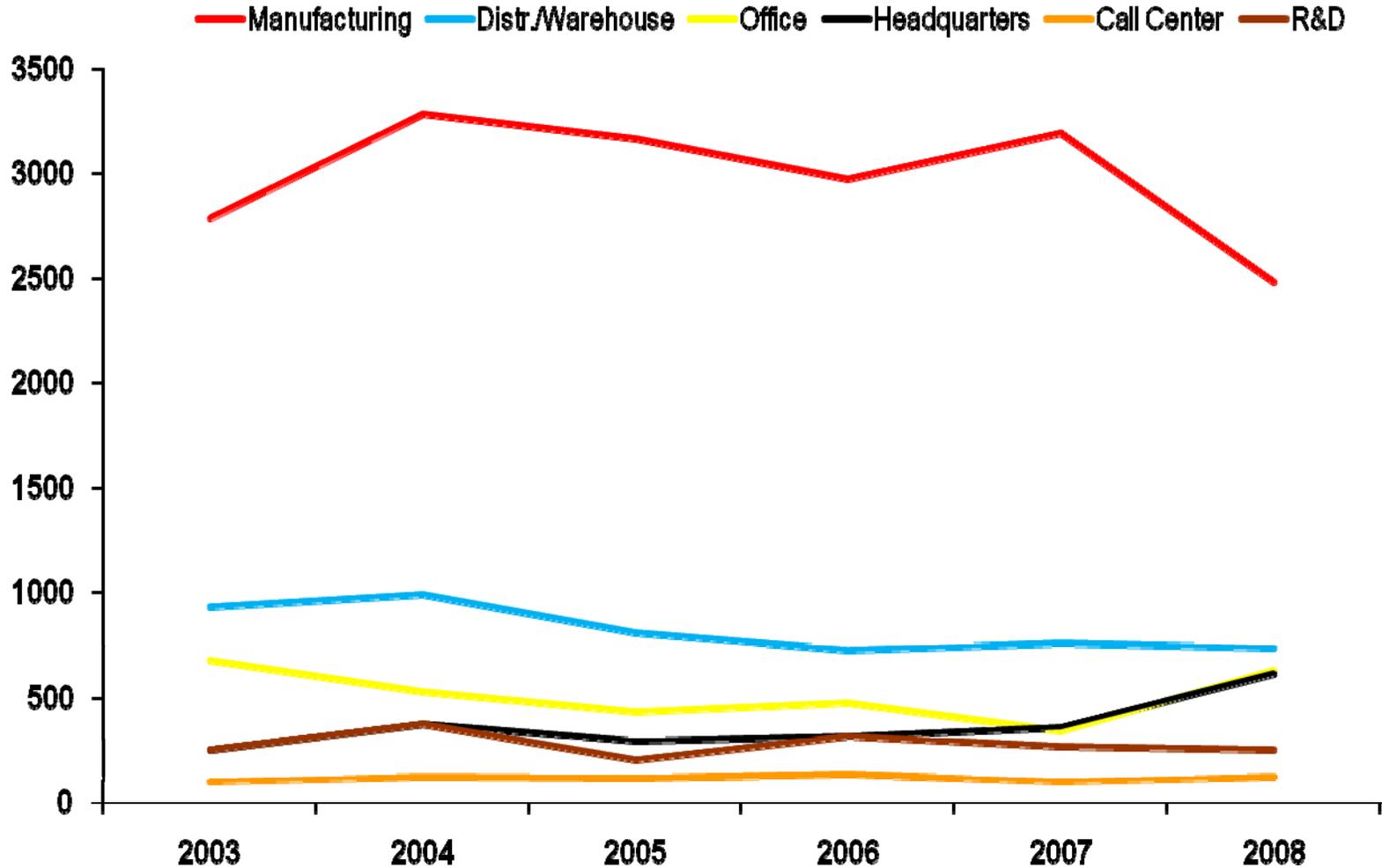


# Objectives Today

- Understanding location/expansion trends
- Look at growth sectors
- Look at renewable (clean) energy growth
- Understanding your growth sectors
- Solar plant attraction
- Wind turbine plant attraction

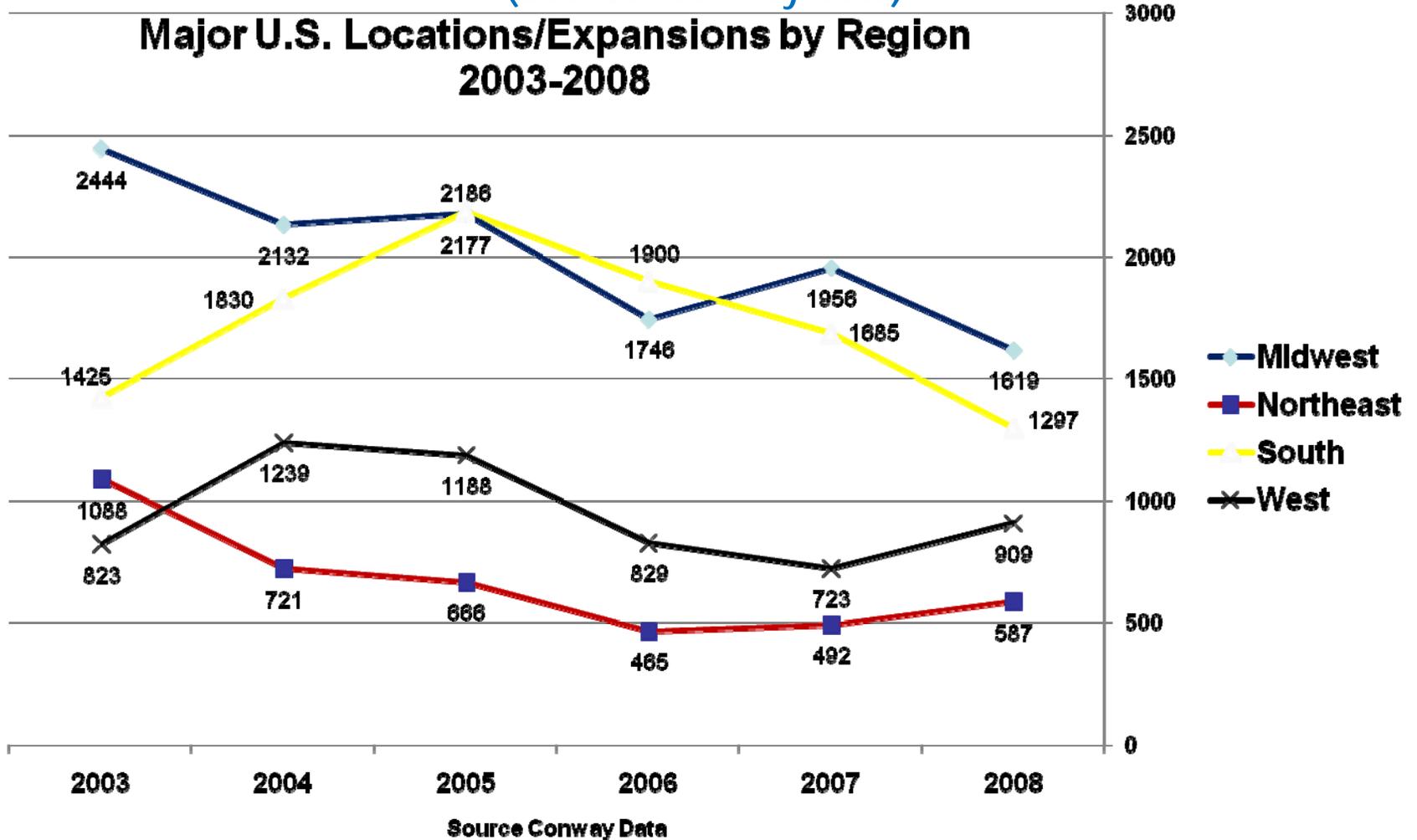
# US Locations/Expansions

## 2003-2008 (Source: Conway Data)



# Regional Location Trends

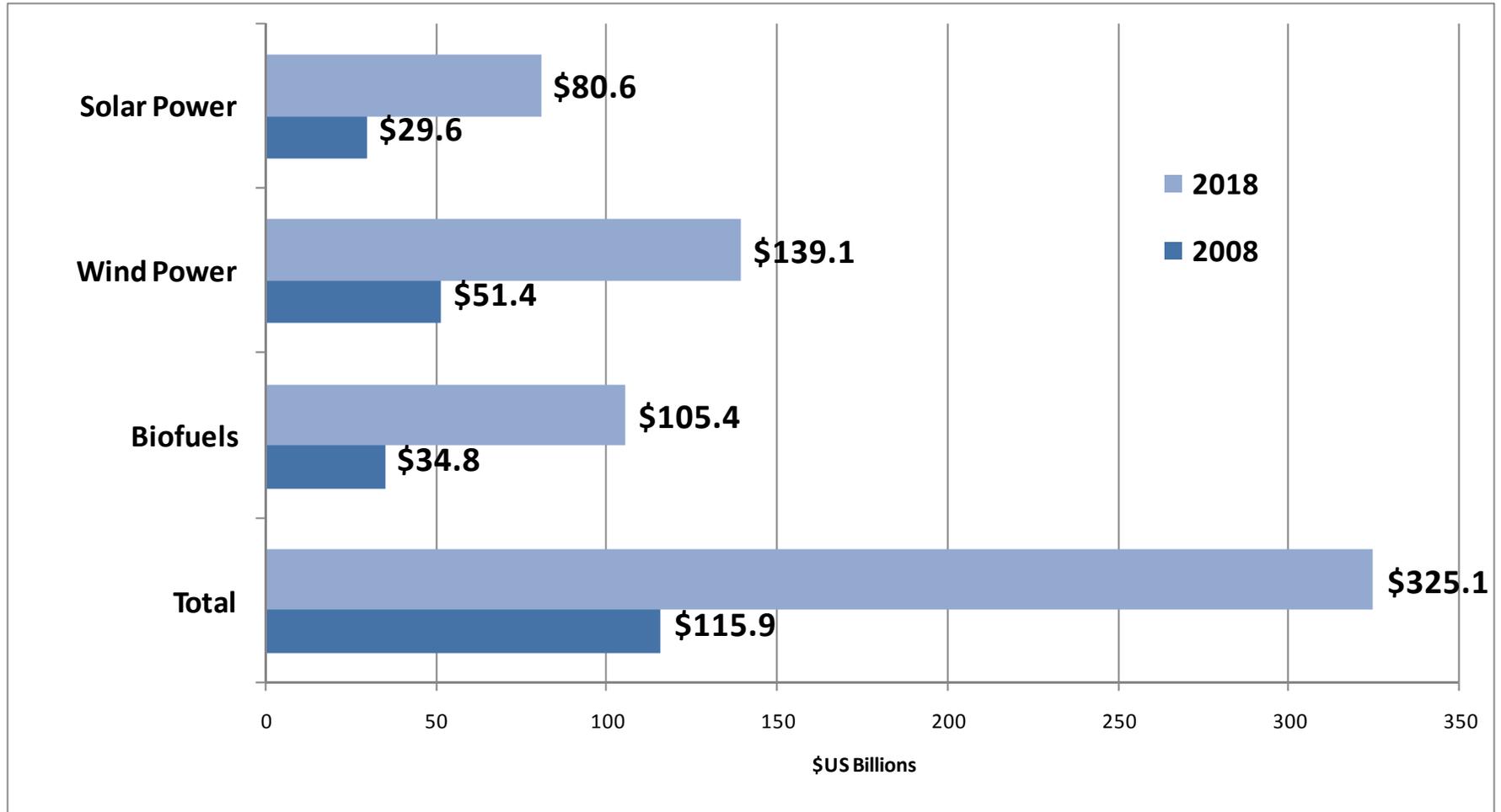
(Source: Conway Data)



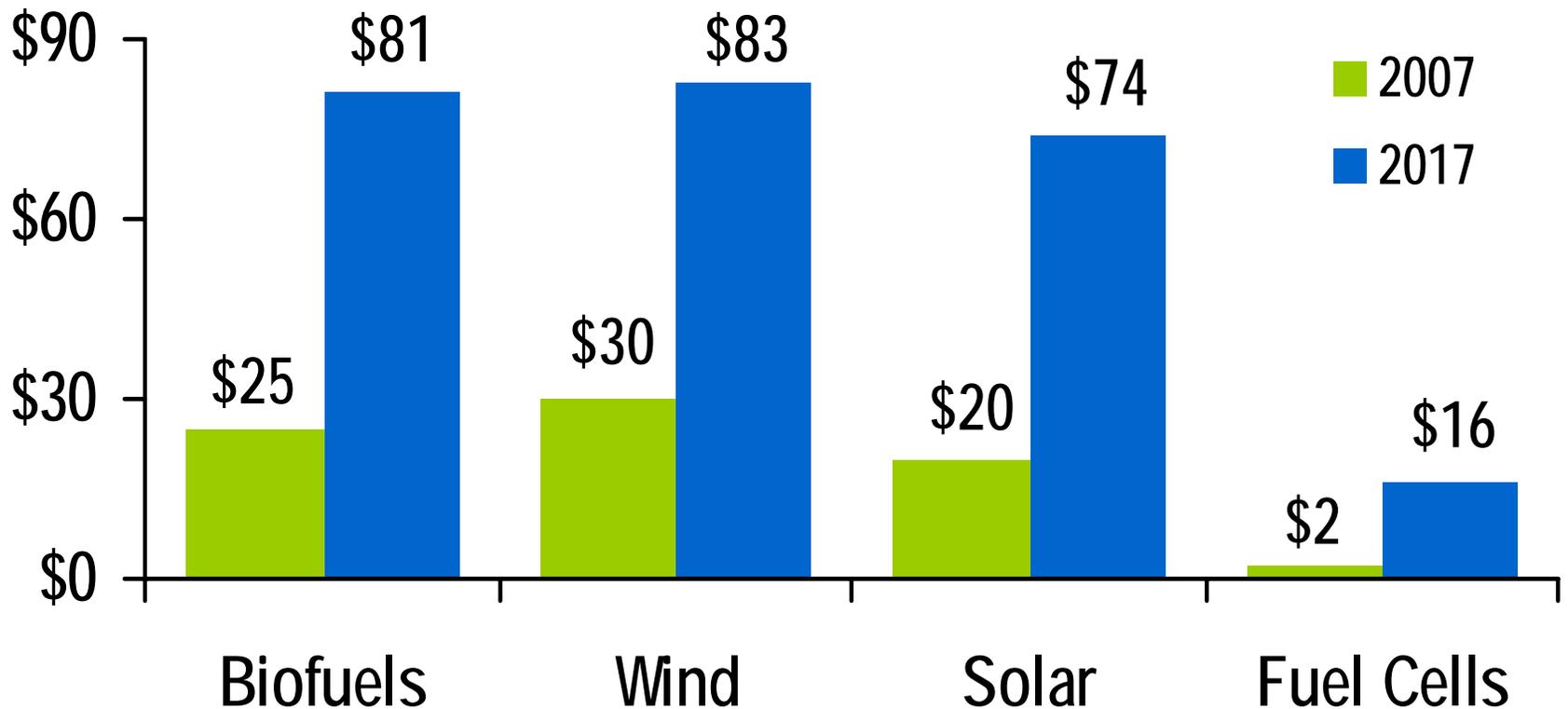
# Sectors expected to grow nationally

- **Renewable Energy**
  - Almost 3x growth in wind, biofuels, solar and fuel cells(2008-2018)
- **Data Centers/Management**
  - Servers has grown from 2.6 million to 11.6 million in the past decade
- **Creative Media**
  - Video game revenues now exceed those of music and film industries
- **Software Development**
  - Growing opportunities in mobile devices, netbooks, “wearable” technology
- **Healthcare and Medical Devices**
  - Health services, medical supplies, and device manufacturing
- **Biotechnology and Life Sciences**
  - Gene and stem cell research
- **Warehouse/Distribution (DC)**

# Global Clean-Energy Projected Growth, 2008-2018 (\$US Billions)



# U.S. Clean-Energy Projected Growth, 2007-2017 (\$US Billions)



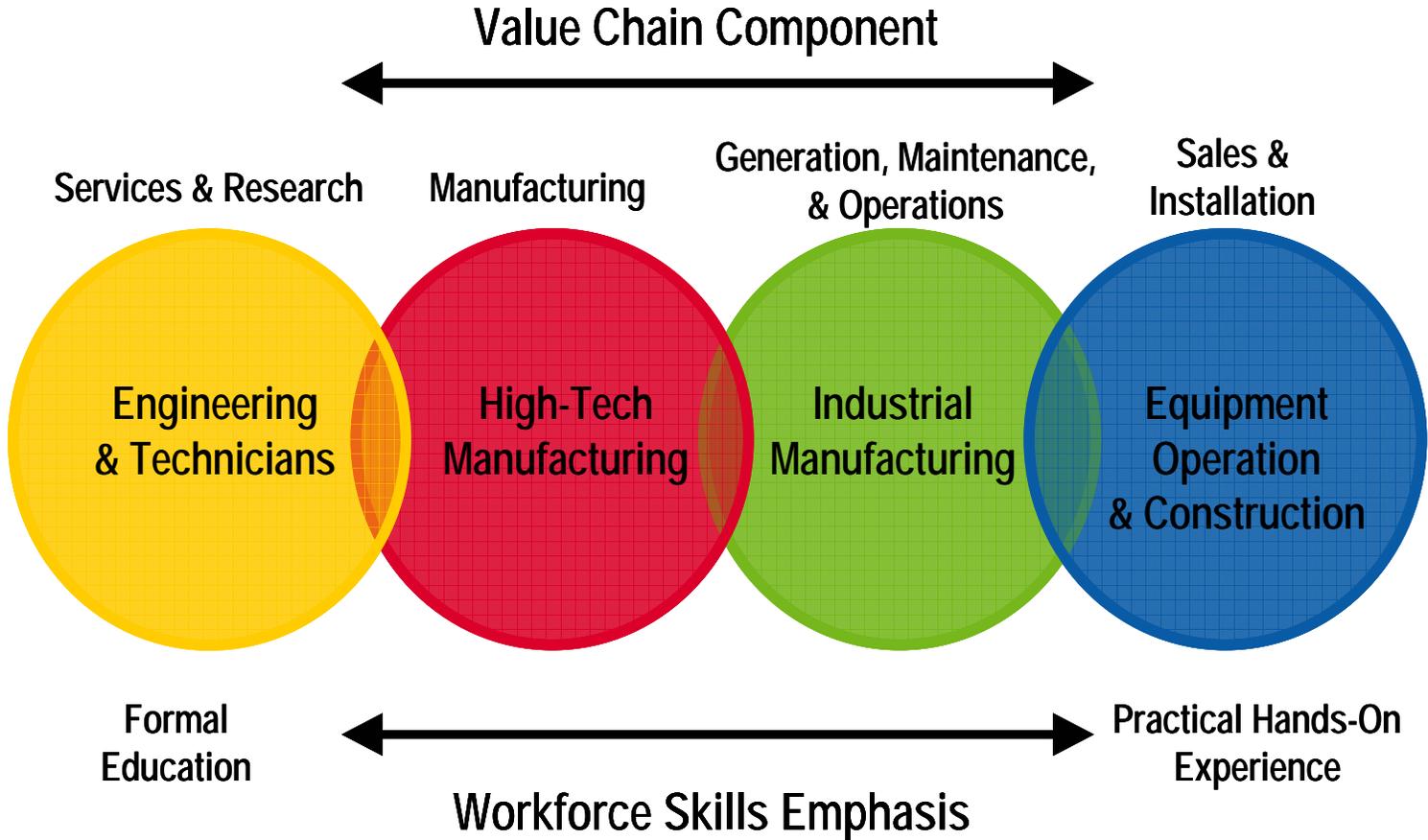
# Foreign investment in renewables in US will be huge!

- \$33 billion in 2009-10; 1/3 from Europe
  - Iberdrola Renovables (Spain) –
    - #2 in wind; will spend \$2 billion/year thru 2012
  - EDP Renovaveis (Portugal)
    - #3 in wind; will spend \$5 billion thru 2012
  - Vestas (Denmark) – world's largest turbine co
    - GE - #2; Gamesa (Spain) - #3
    - 3 new plants in Colorado alone by 2010
  - Investors scrambling to grab stimulus \$!

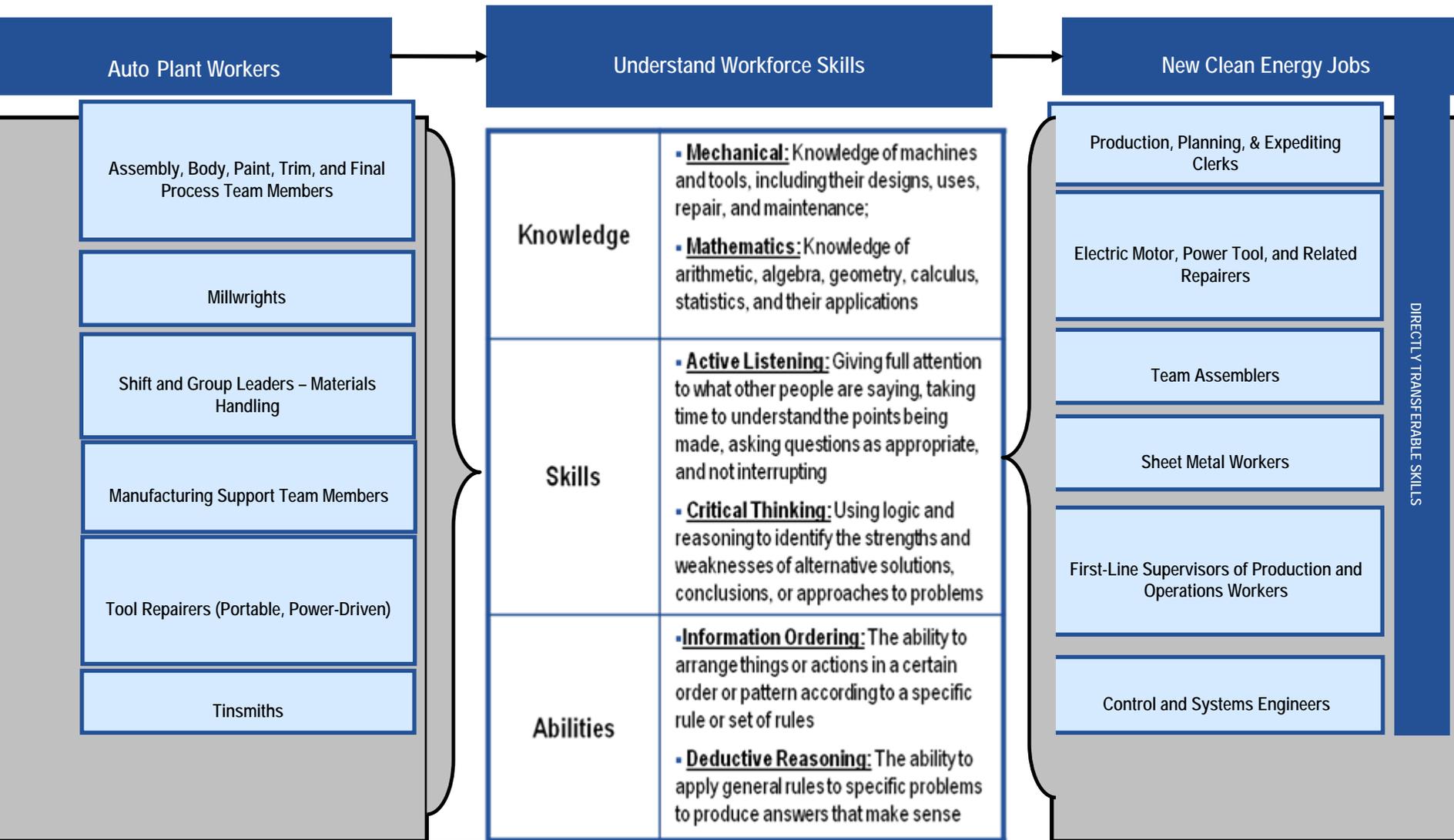
Source: *Business Week*

# Renewable Energy Workforce

## RENEWABLE ENERGY WORKFORCE DEVELOPMENT PIPELINE

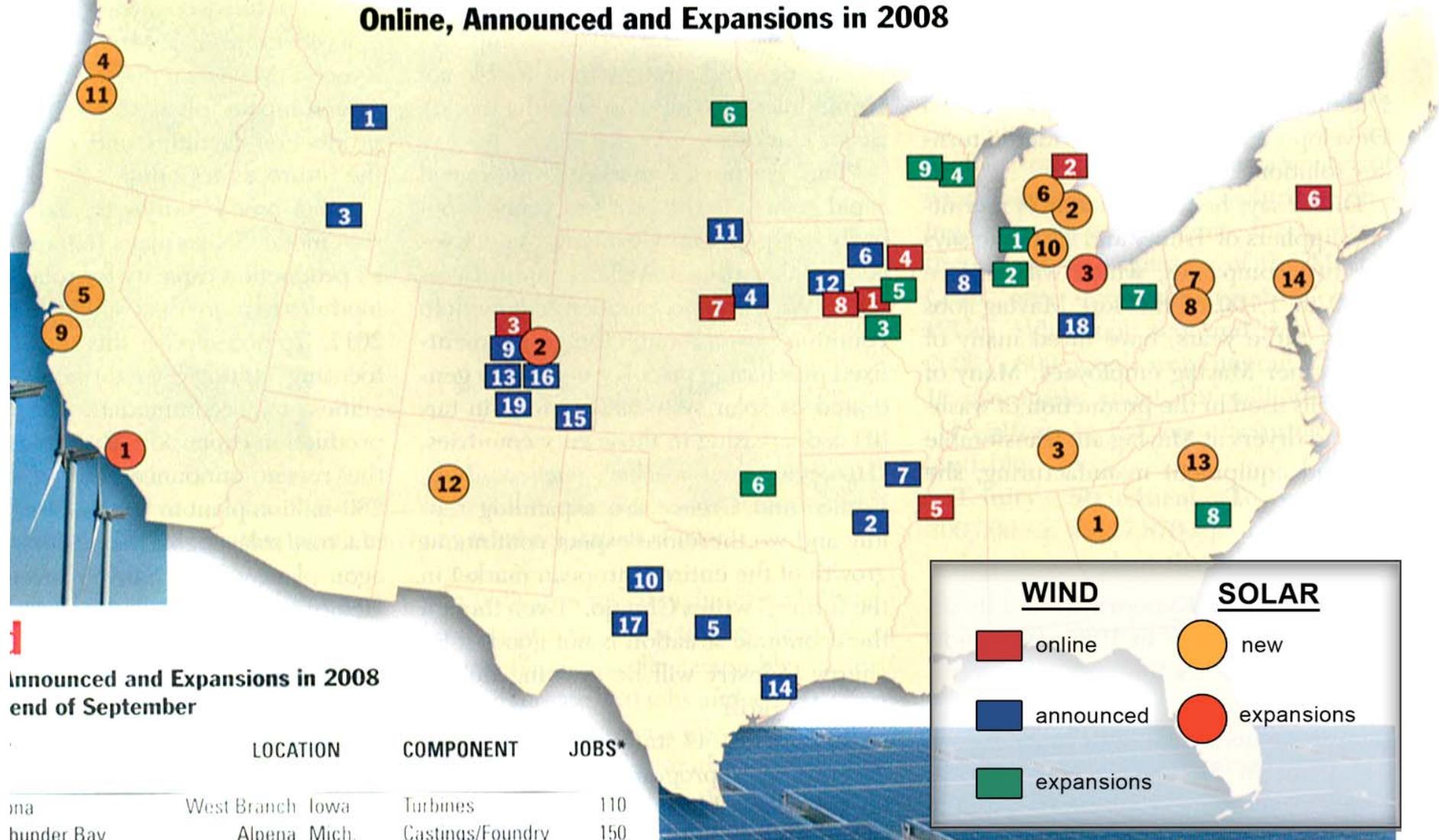


# Importance of Transferable Skills



# Solar & Wind Industry Manufacturing Facilities

## Online, Announced and Expansions in 2008



**1**  
**Announced and Expansions in 2008**  
**end of September**

	LOCATION	COMPONENT	JOBS*
Albena	West Branch Iowa	Turbines	110
Albena	Albena Mich.	Castings/Foundry	150

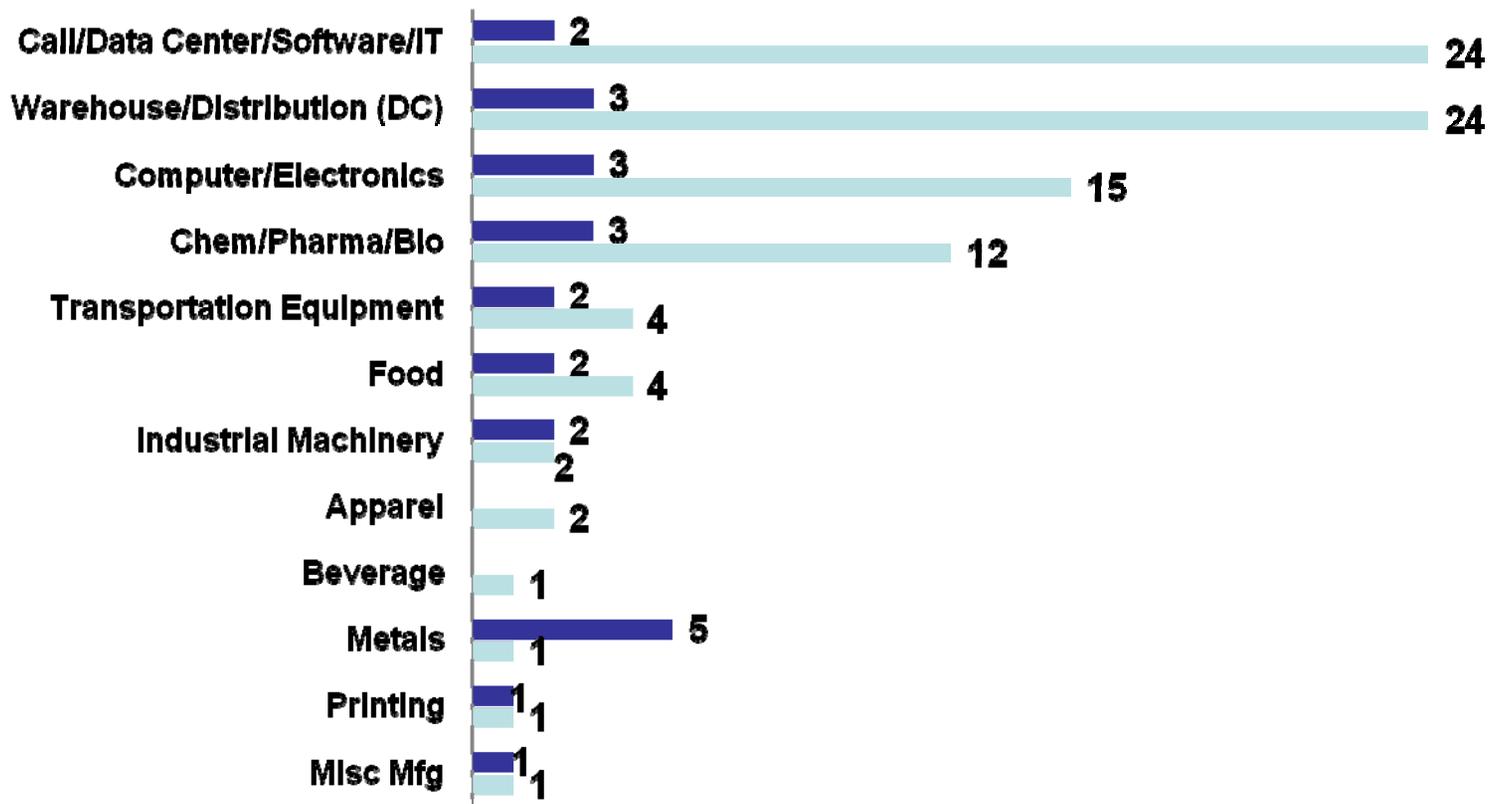
(Source: *Site Selection Magazine*)

# Understand Your Active “Sectors”

## AZ/CA Major Locations/Expansions 2008-09

Source: FCG & Conway Data

■ AZ ■ CA

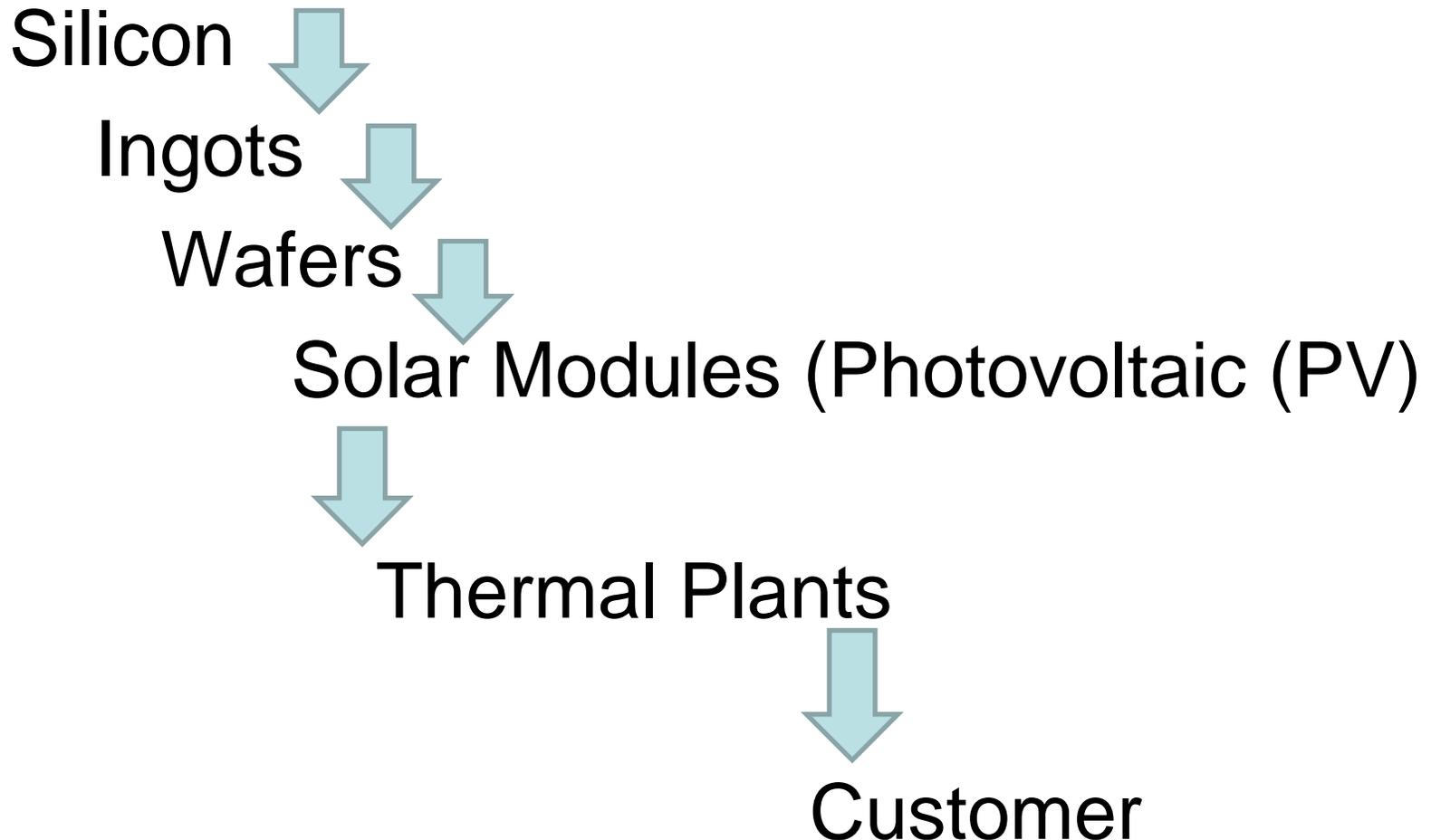


# Active sectors will locate again!

## Major Deals (AZ-CA) - 2<sup>nd</sup> Half, 2008

<b><i>Location</i></b>	<b><i>Company</i></b>	<b><i>Product/Service</i></b>	<b><i>Jobs/Sq.Ft.</i></b>	<b><i>Type</i></b>
Chandler, AZ	Covance	Clinical Trials	600	R&D
Fremont, CA	Solyndra	Solar Panels	390/609,000	Mfg
El Segundo, CA	Northrop Grumman	Aerospace	330,000	Office
San Diego, AZ	Qualcomm	Communications Equipment	300,000	Mfg
Phoenix, AZ	Abraxis Bioscience	Pharma	205/200,000	Mfg/ R&D
Burbank, CA	Kaiser Permanente	Health Care	194,000	Office
Oro Valley, AZ	Ventana Medical	Instruments	250	Mfg
Phoenix, AZ	Aspenhome	Furniture	323,000	DC/HQ
Stockton, CA	Sears	Appliances Dist.	250/780,000	DC
Moreno Valley, CA	Skechers	Footwear	1,812,000	DC

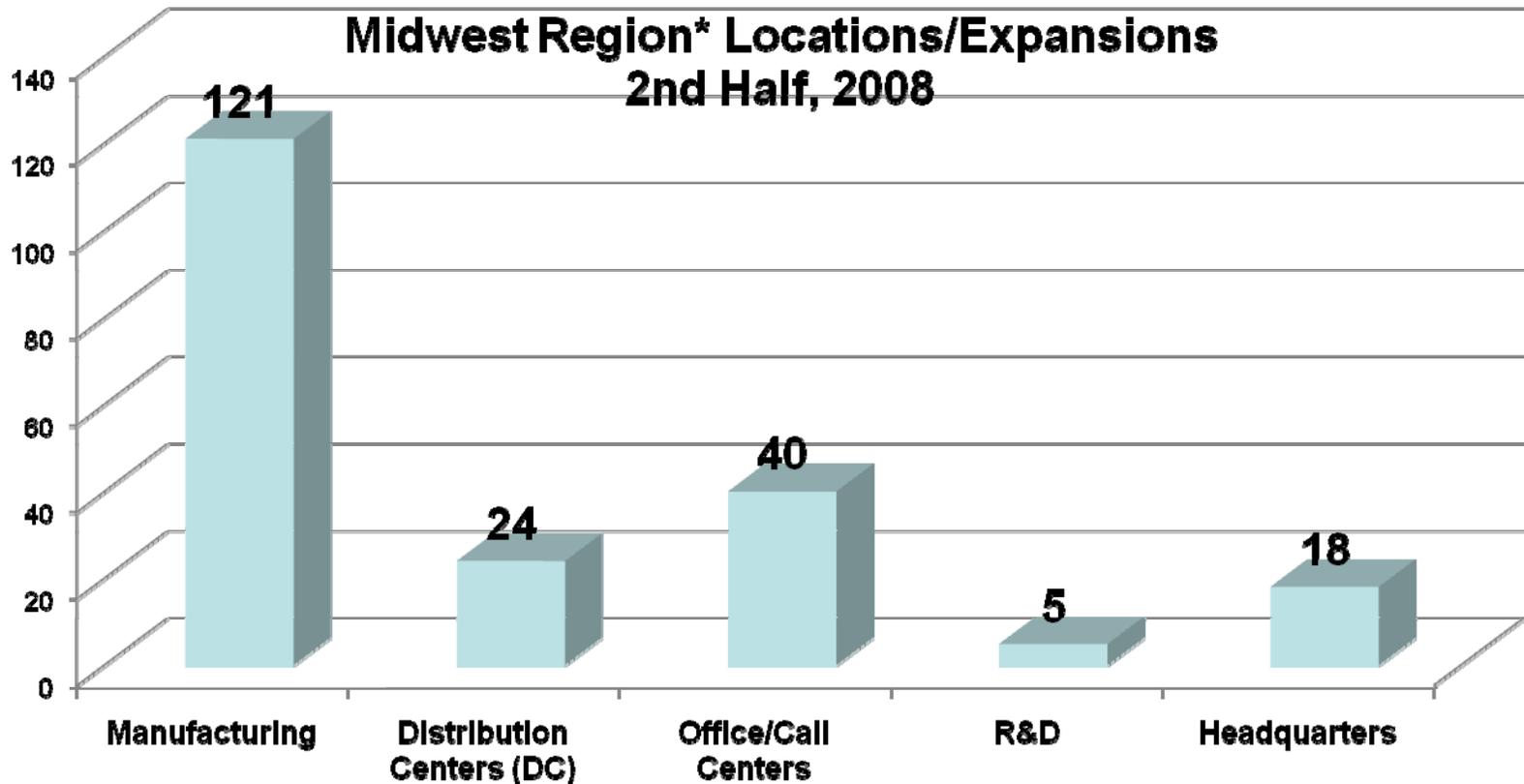
# “Life Cycle” of Solar Production



# Solar Photovoltaic (PV) Plant Site Criteria

- Location with good access to market
  - supports supply chain for raw materials (glass, frames)
  - finished modules delivered to solar sites
- Skilled workers trained in automation, clean room operations
- Reliable and low cost electricity
- Buildings that allow putting solar modules on the roof
- Communities that support green and sustainable practices
- Attractive/clean environment for plant
- Incentives (especially sizable tax credits).

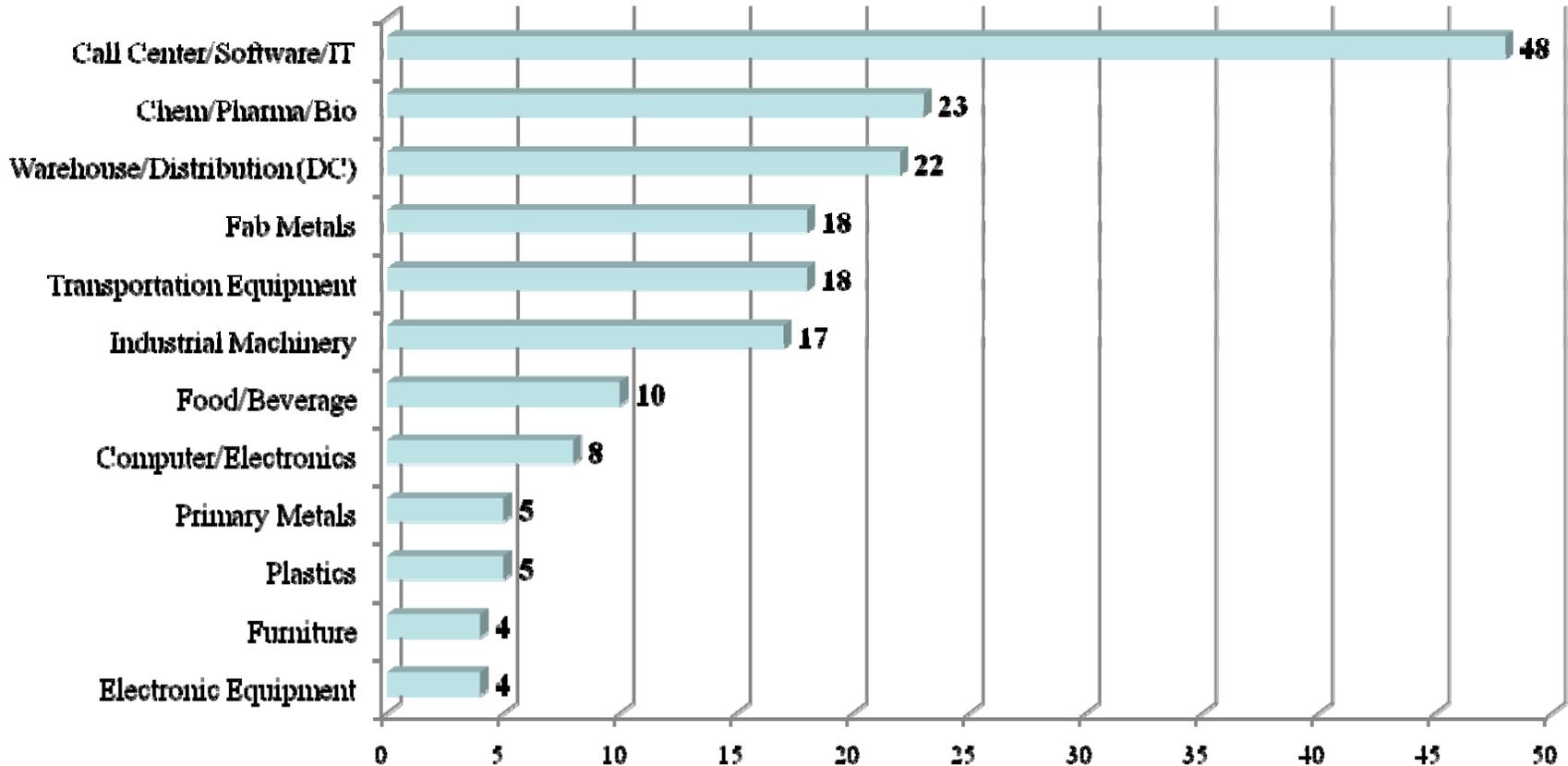
# Active “Broad Sectors”



\*KS, AR, OK , MO Source: FCG & Conway Data 3rdQ08-4thQ08

# Know your specific **Hot** Sectors

Midwest\* Region Locations/Expansions  
2nd Half 2008



\*KS, AR, OK, MO 3rdQ08-4thQ08

Source: FCG & Conway Data

# As we know...Active sectors will locate again!

AR, KS, OK, MO

2<sup>nd</sup> Half, 2008 (Source: Conway Data)

<u>Location</u>	<u>Company</u>	<u>Product/Service</u>	<u>Jobs</u>	<u>Sq.Ft.</u>
Winfield, KS	Newell Rubbermaid	Plastics	90	660,000
McPherson, KS	Viega	Plumbing Fixtures	300	439,000
N. Little Rock, AR	Caterpillar	Road Graders	600	
<b>Jonesboro, AR</b>	<b>Nordex USA</b>	<b>Wind Turbines</b>	<b>700</b>	
Springfield, MO	NorthStar	Batteries	300	300,000
Wichita, KS	Cessna	Aircraft	1010	
Sikeston, MO	Orgill	Building Materials	150	795,000
Clayton, MO	Centene	Healthcare HQ	700	500,000
Moore, OK	Hyatt	Back Office	300	43,000
Olathe, KS	Farmers Insurance	Call Center	600	

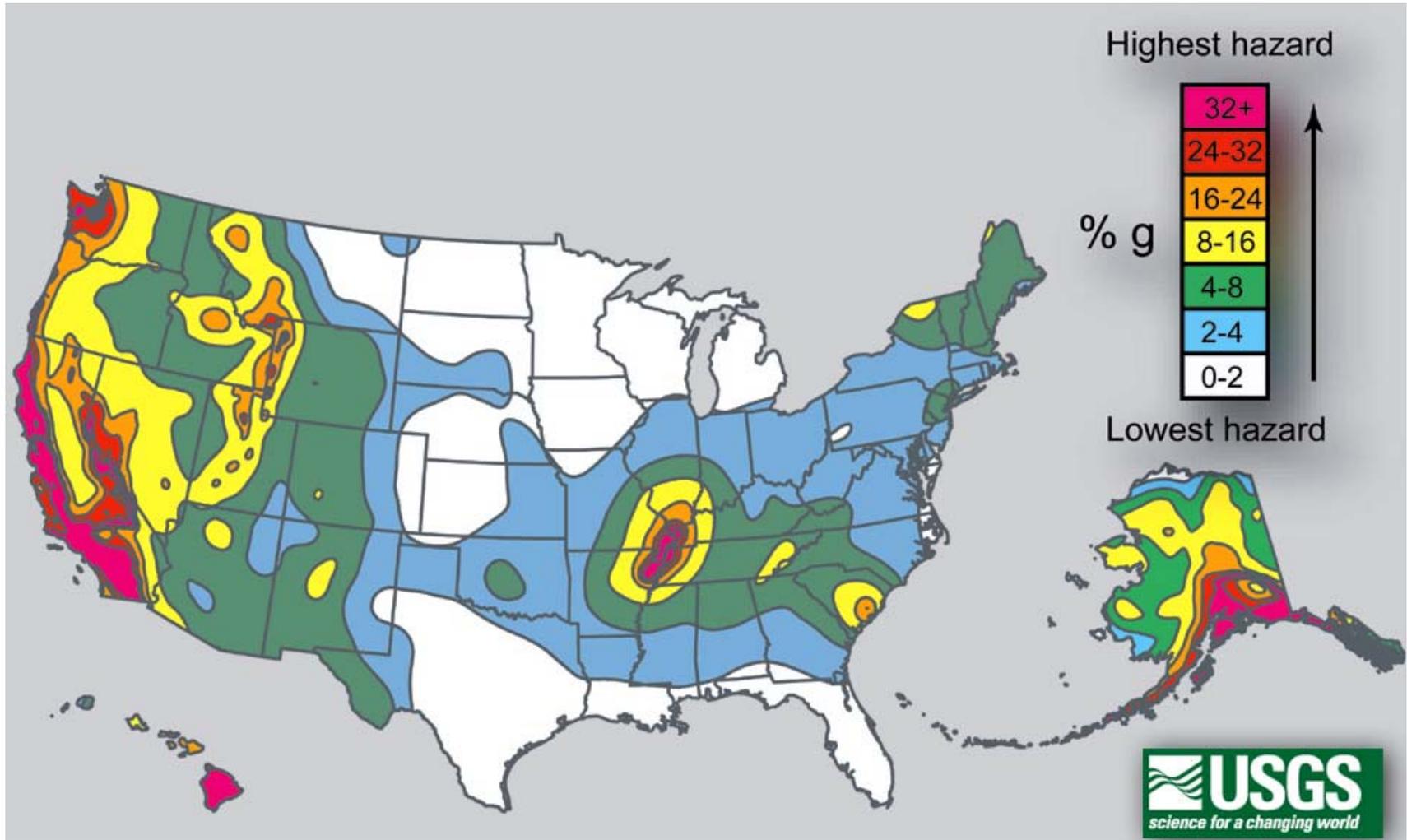
# Wind Turbine Site Criteria

Nacelle units (gearbox, generator and transformer components) & Blade assembly

- Access to market - wind farms
- Available labor (up to 1000 jobs) - machining and electronics skills with good quality
- Rail (more than one provider preferred)
- Sites (up to 200 acres)/available industrial buildings (up to 500,000 sq.ft./high ceilings)
- Free of earthquake or flood zones
- Training – college offering mechanical and electrical engineering degrees; plus machining and electronics
- Incentives and positive state/local policies.

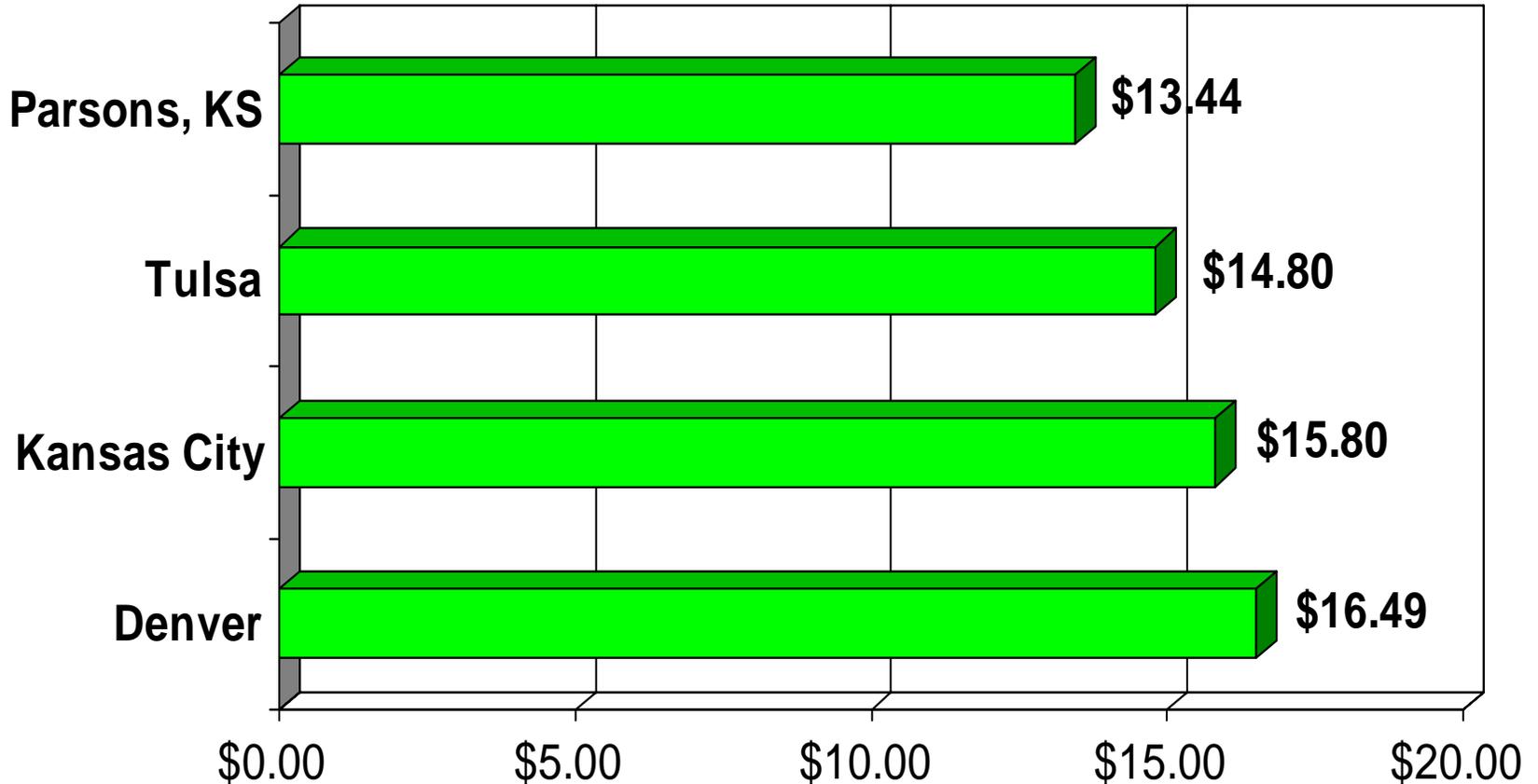
# Conduct your due diligence

## Seismic data



# Due diligence ... Wages/Skills

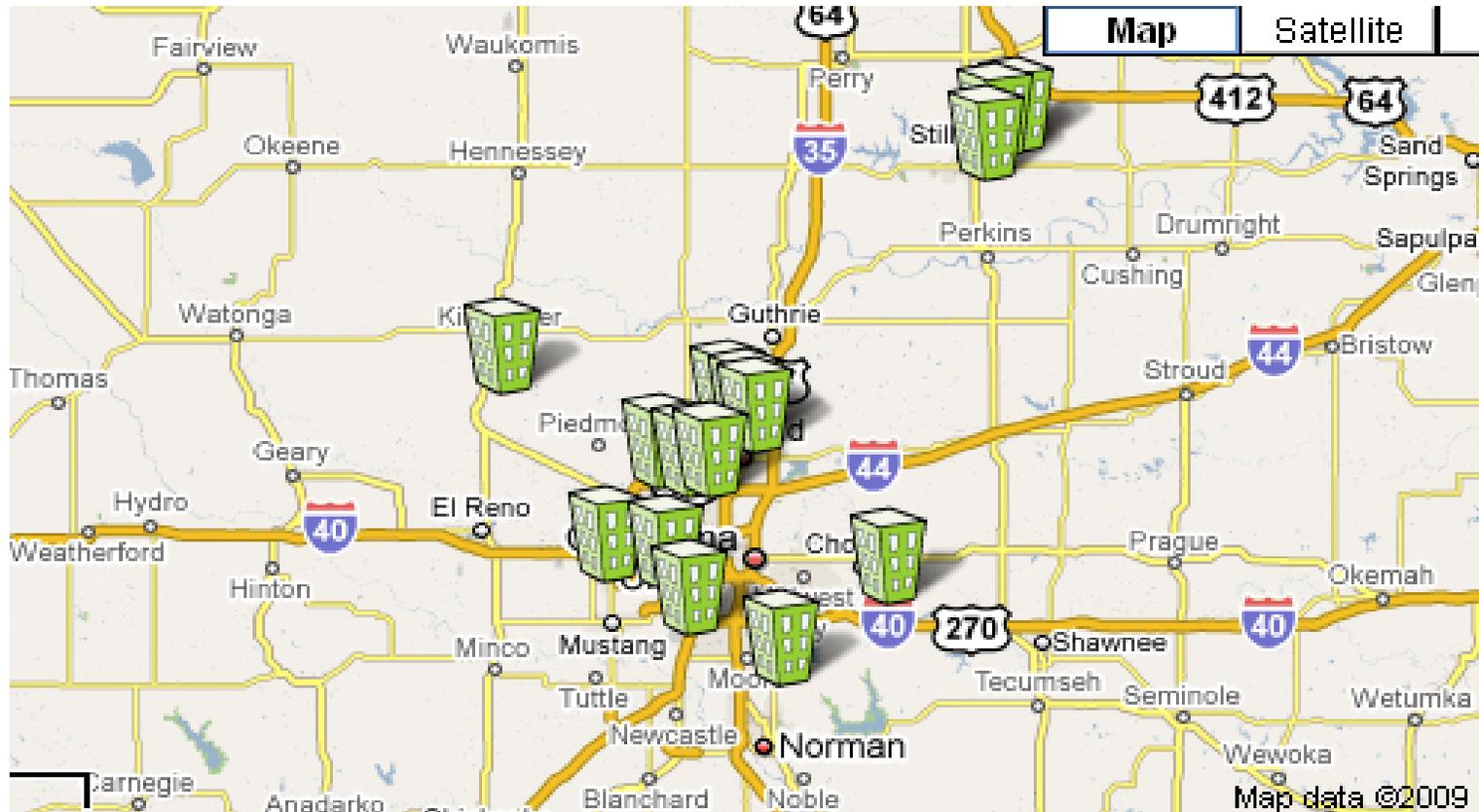
## Welders (per/hr)



Source: Economics Research Institute (ERI), 1 yr. median wage; 4th quarter 2008

# Due diligence ... Sites

(Source: **ZoomProspector**)

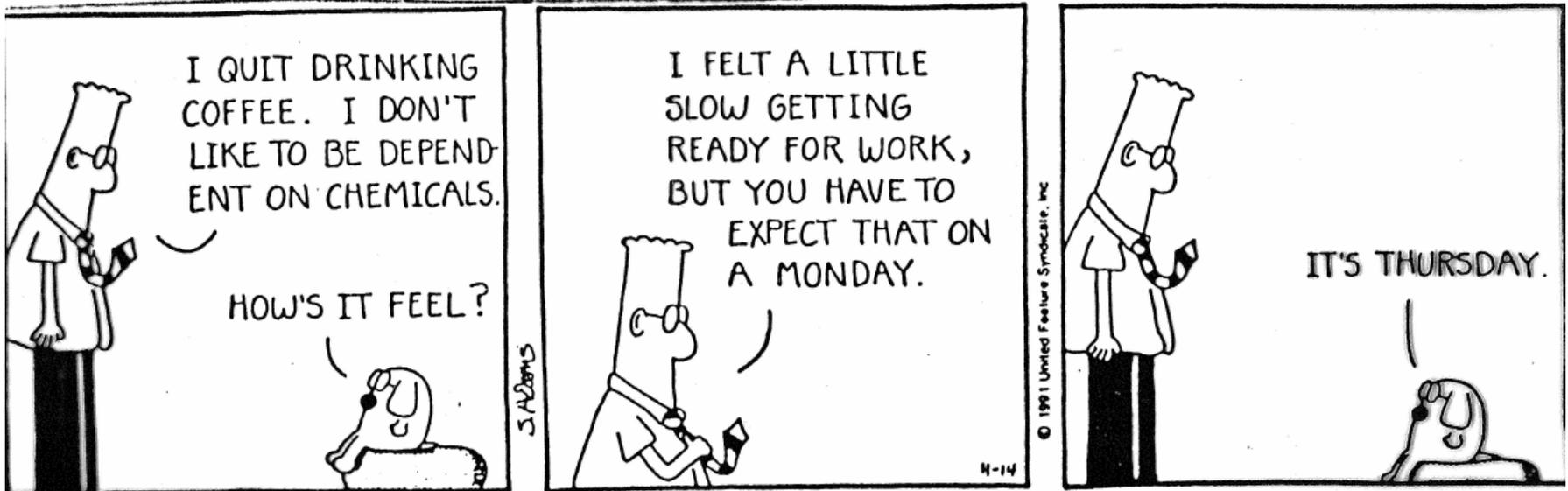


# Ultimately...Know how will you compete?

## Criteria Rating Wind Turbines

	<u>Weight</u>	<u>Your City</u>	<u>Total</u>
Available labor	10	7	70
Access to wind farms	9	9	81
Machining skills training	10	7	70
Rail	9	9	81
Large sites (100 acre +)	9	9	81
Incentives and pro business attitude	9	9	81
Electric Power (reliability & cost)	8	5	40
Access to Suppliers	7	5	35
Good Labor Relations	7	8	56

# Stay Alert for those Projects! ...Questions?



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