SAN JUAN COLLEGE

School of Energy

# Energy Production Education and Training

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Dean, School of Energy

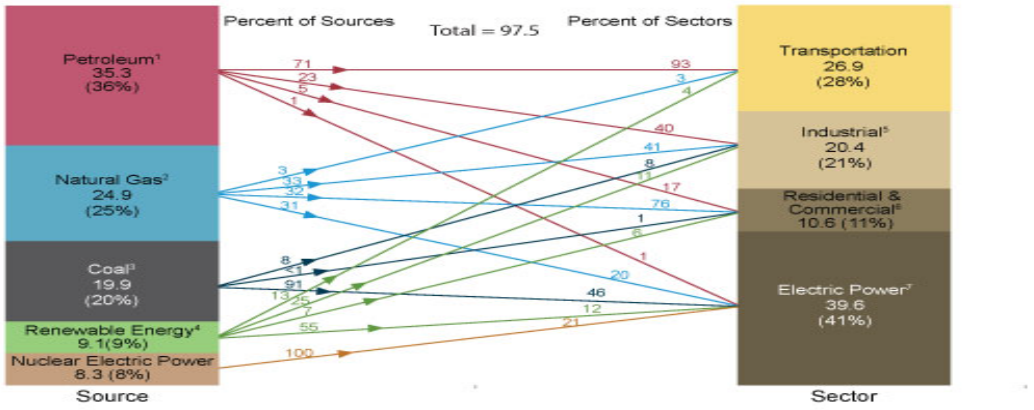
# Overview

- Energy Demand & Production
- The Future
  - Workforce and Education

# U.S. Energy Consumption

## Primary Energy Consumption By Source and Sector, 2011

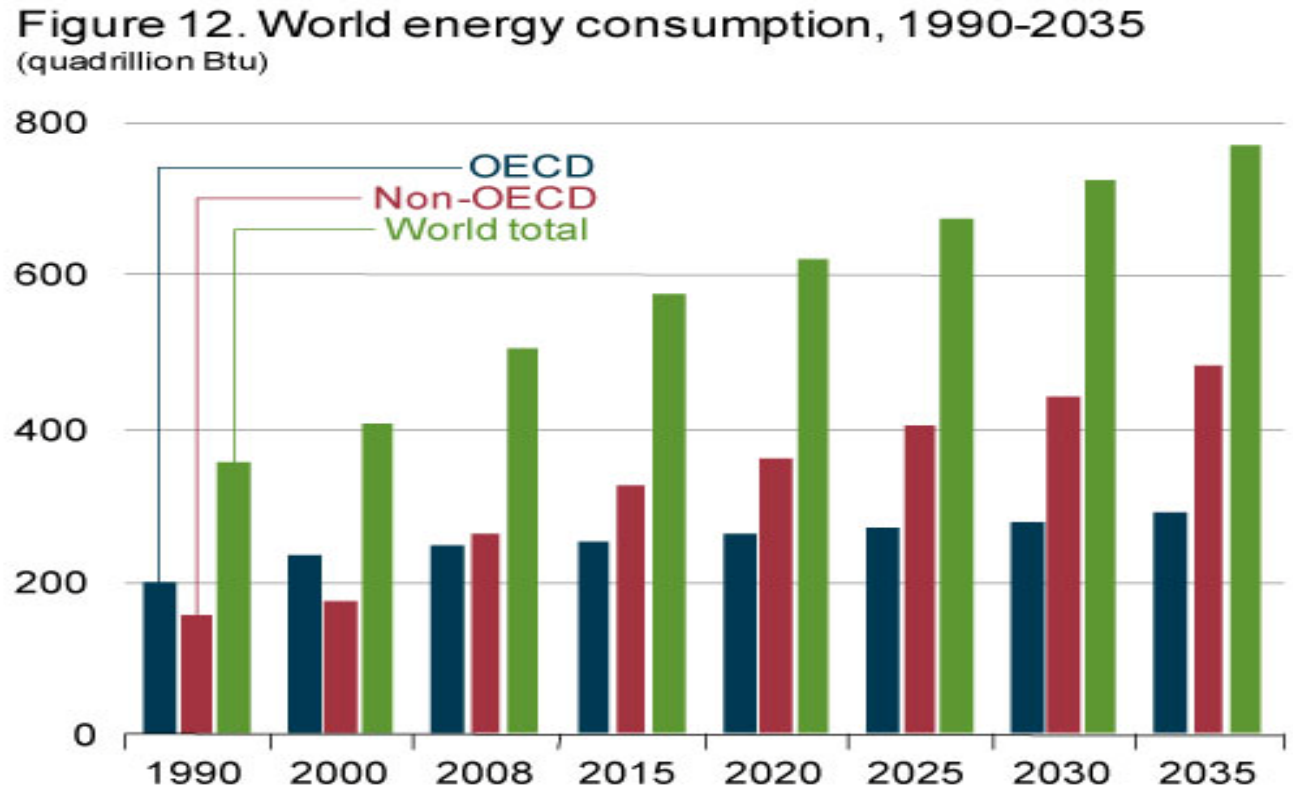
quadrillion Btu




Endnotes:
1 Does not include biofuels that have been blended with petroleum—biofuels are included in "Renewable Energy."
2 Excludes supplemental gaseous fuels.
3 Includes less than 0.1 quadrillion Btu of coal coke net exports.
4 Conventional hydroelectric power, geothermal, solar/PV, wind, and biomass.
5 Includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
6 Includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
7 Electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes 0.1 quadrillion Btu of electricity net imports not shown under "Source."

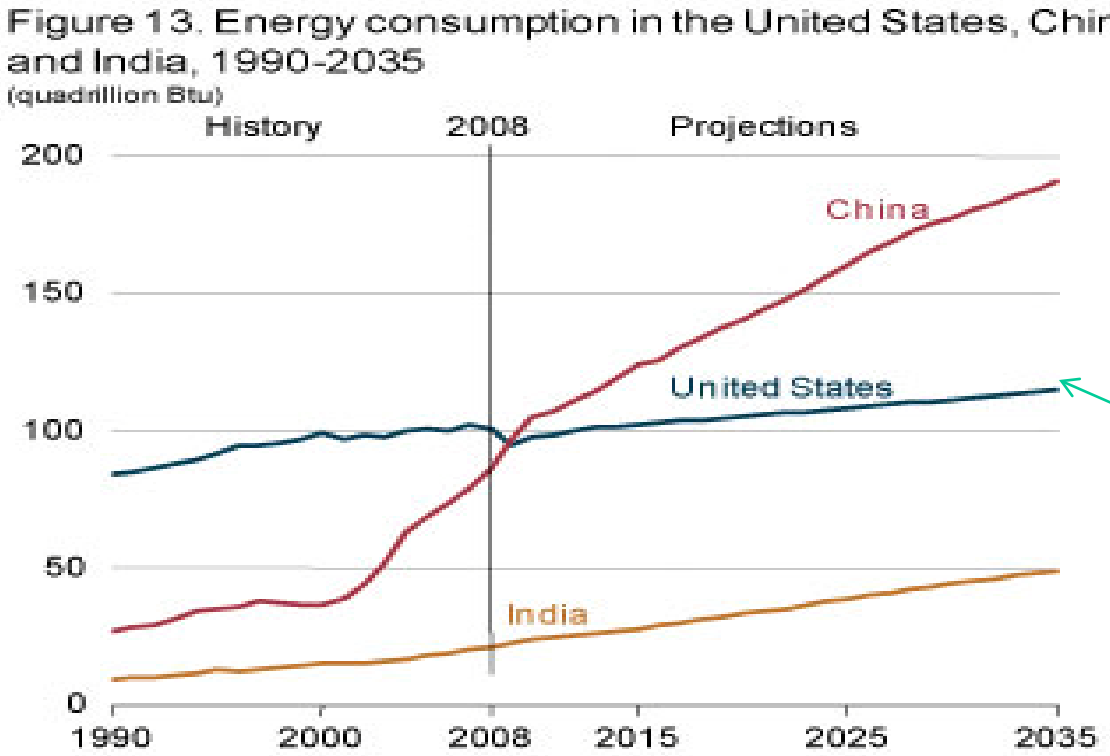
Note: Primary energy in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy (for example, coal is used to generate electricity).
• Sum of components may not equal total due to independent rounding.
Sources: U.S. Energy Information Administration, Monthly Energy Review (April 2012), Tables 1.3, 2.1-2.5, **preliminary 2011 data.**

# Energy Consumption




Organization for Economic Co-operation and Development (OECD) – U.S. EIA 2012

# U.S. Energy Line




Inside the Line

# Inside the Line
# 2012-2030

- Moderate Growth
- Market Movement
- Demography
- Global demand

# Education and Industry-driven Collaboration (to build) Energy Production Education/ Training Center U.S. model

# What We Do

- Partner with energy employers to address their training and labor needs.
- Design and offer training to enhance job skills and ensure safe work practices.
- Provide learning opportunities for individuals needing new skills to gain employment or advance in their jobs.

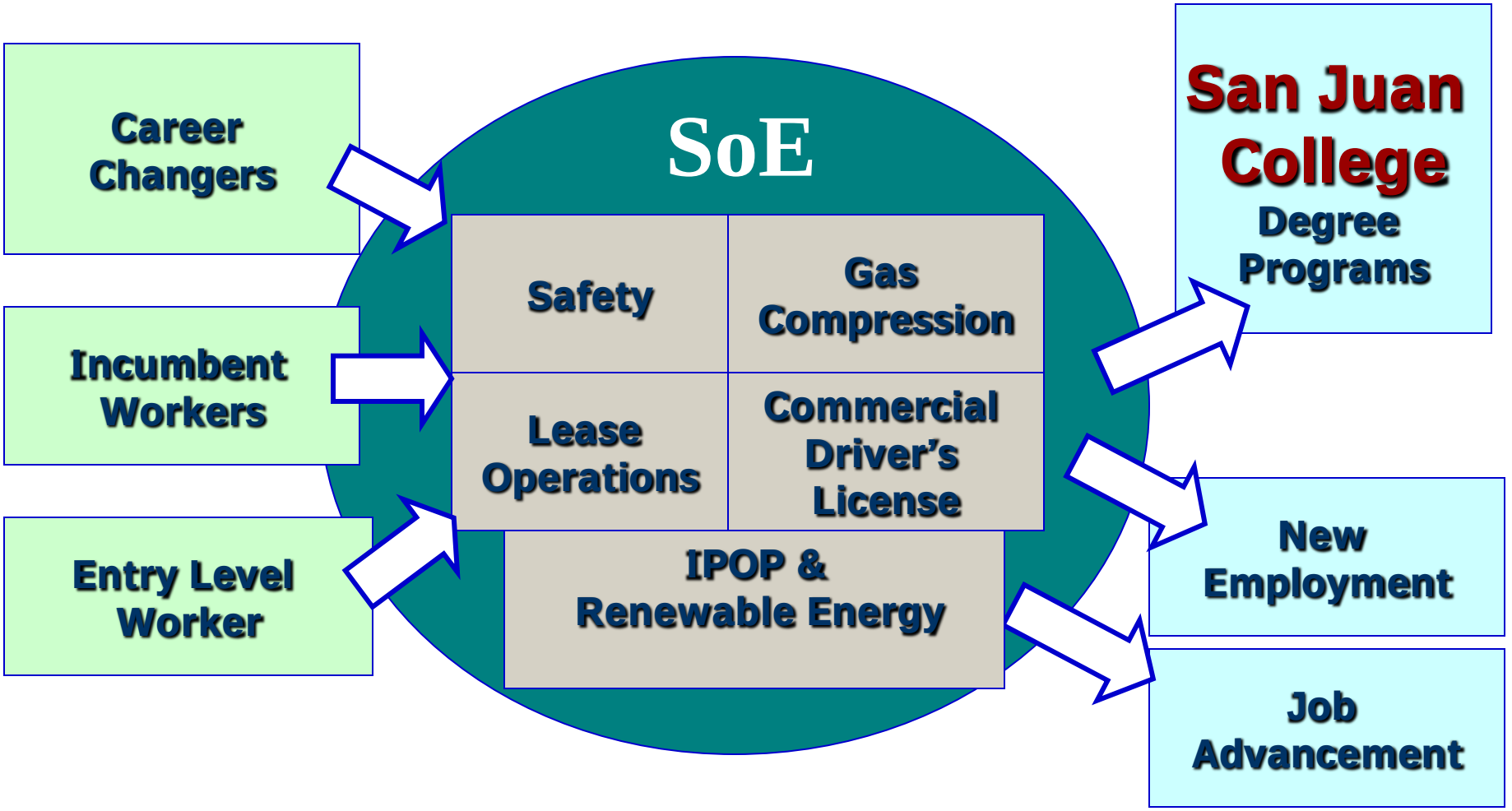
# Programs Offered. . .

- School of Energy grants –
  - – Associate of Applied Science
    - Natural Gas Compression
    - Petroleum Technology
    - Renewable Energy
    - Industrial  Process Operations
    - Instrumentation and Controls
    - Occupational Safety

# Invaluable Industry Partnerships

- Oil and Gas Producers
- Many Service Companies
- Two Power Plants
- Local, state ,and federal government agencies
- Community members

# Recruitment - Training -Placement



# Quality Assurance

**Advisory Committees**

| | |
|---|---|
| **IPOP**<br>**Lease Operations** | **Natural Gas Comp**<br>**CDL**<br>**Safety** |

# - Continuing Challenges -

- Recruitment and referrals of trainees
- Ongoing public information
- Staying responsive to the interests, needs and demands of the industry

# Future

- Advanced Training
- New Programs
  - –Low Carbon Emissions Technology
- Training and Education Consistency

# U.S. Education and Training Consistency

- Identify Industry Critical Jobs
- Indentify Job Competencies
- Develop Curriculum for Programs
- Develop Certifications (industry identified)
- Develop Program Accreditation
- Strategic Community Colleges

# Our Goal

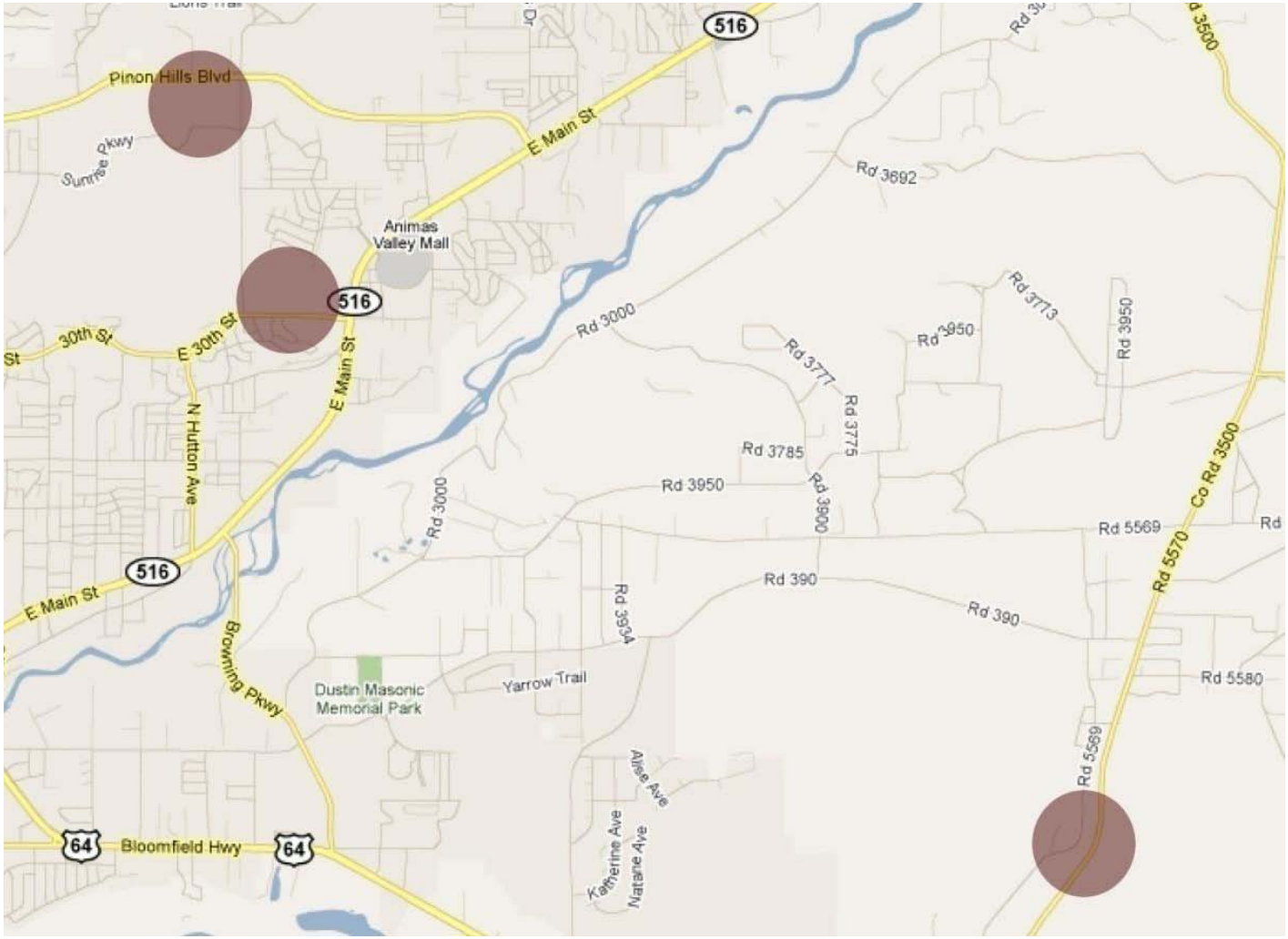
**San Juan College's**
**School of Energy will be:**

- The premier model for energy training in the U.S.
- The training provider of choice for energy related employers in the region

# San Juan College


School of Energy

Farmington, NM


516
Pinon Hills Blvd
E Main St
Sunrise Pkwy
Animas Valley Mall
516
30th St
E 30th St
St
N Hutton Ave
E Main St
Rd 3000
Rd 3692
Rd 3773
Rd 3950
Rd 3771
Rd 3775
Rd 3785
Rd 3950
Rd 3900
Rd 3000
Rd 5569
Co Rd 3500
Rd 5570
Rd
516
E Main St
Browning Pkwy
Rd 390
Rd 390
Rd 3934
Dustin Masonic Memorial Park
Yarrow Trail
Rd 5580
Rd 5569
Alysse Ave
Katherine Ave
Natalie Ave
64
Bloomfield Hwy
64

# School of Energy Center

- Centralize three locations onto San Juan College's main campus.
- Majority of funding from private & industry donors.
- Energy industry is critical to San Juan County economy and significant important to the state and national economies.

*The new School of Energy Center would offer state-of-the-art training facilities for the Four Corners community – fulfilling a growing need for continued training for the energy industry.*

# School of Energy Center

- 54,700 square feet of new construction that includes classrooms, laboratories and training facilities; offices for faculty and staff; and related support spaces.
- Centralize the School of Energy programs at San Juan College's main campus
- Additional funding from private & industry donors
- Requesting 40% ($5,000,000)
- Total Cost $15,000,000


bp
August 15, 2012
Date
Pay to the Order of
San Juan College Foundation
$ 4,000,000.00
Four Million
Dollars
For School of Energy
BP America

# School of Energy Center

www.sanjuancollege.edu

505.327.5705

Thank You