



# Energy Sector in Belize

By:

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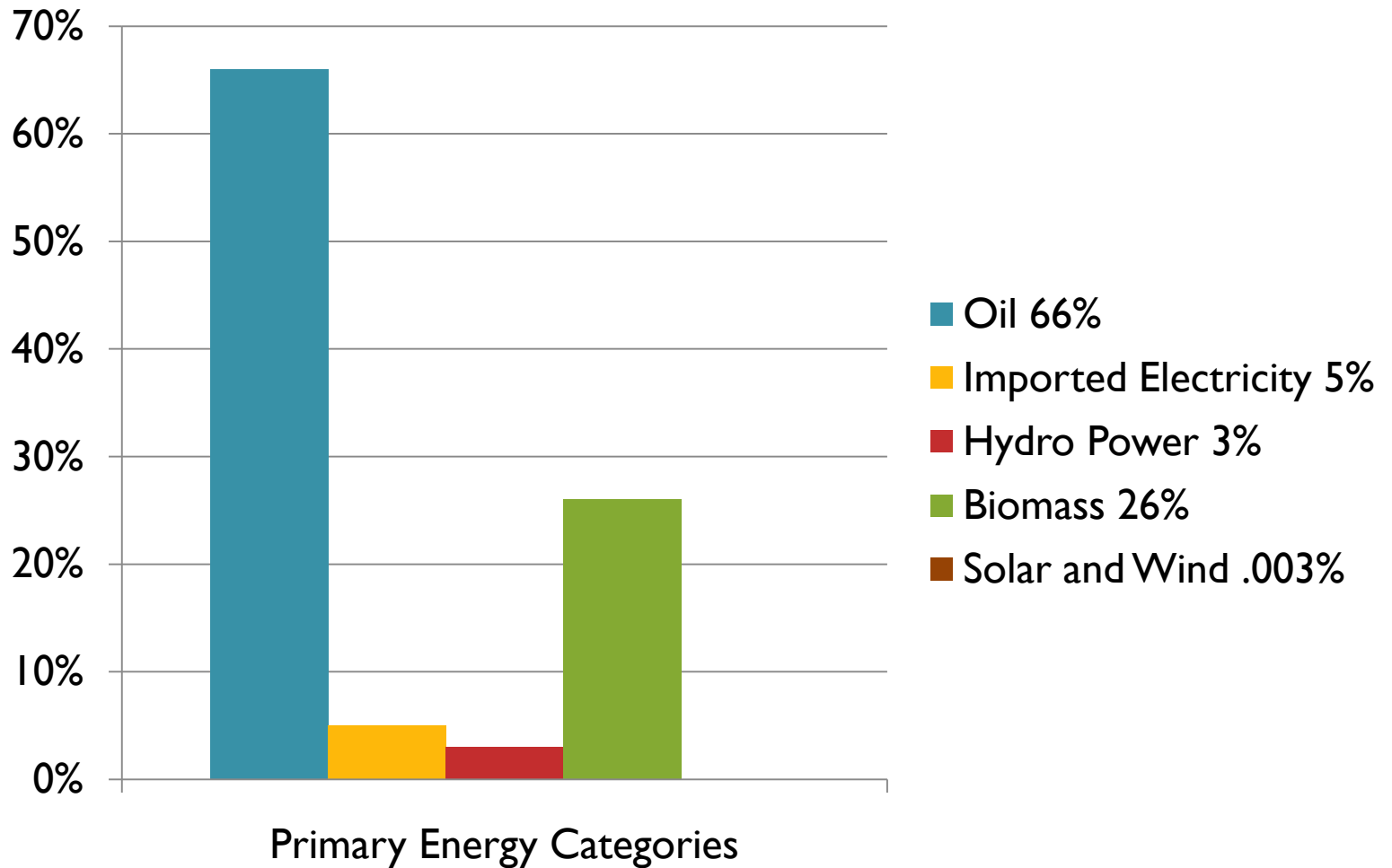
Public Utilities Commission

Presented at:

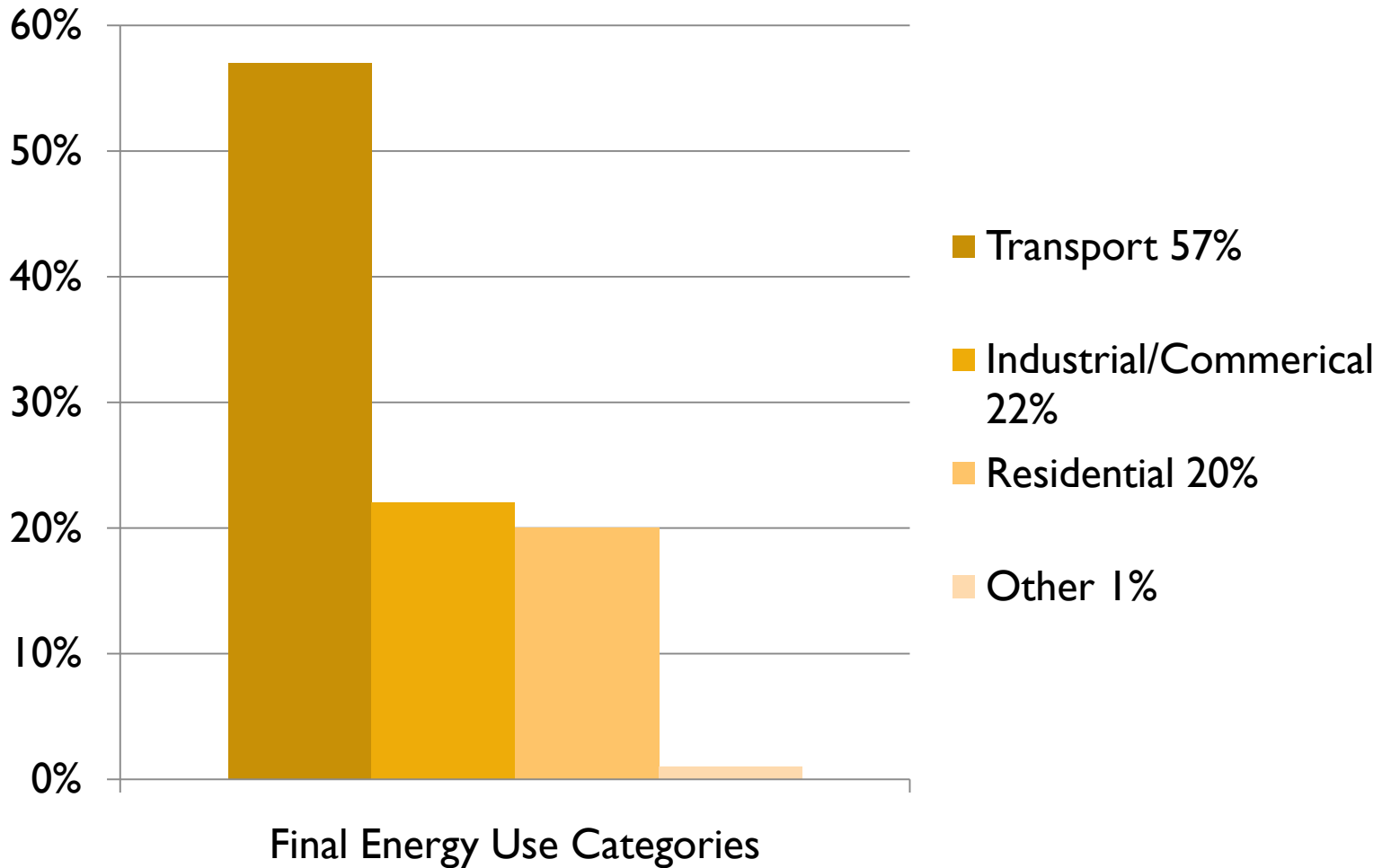
Energy and Environmental Partnership of  
Central America

November 9<sup>th</sup>, 2010

# Primary Energy

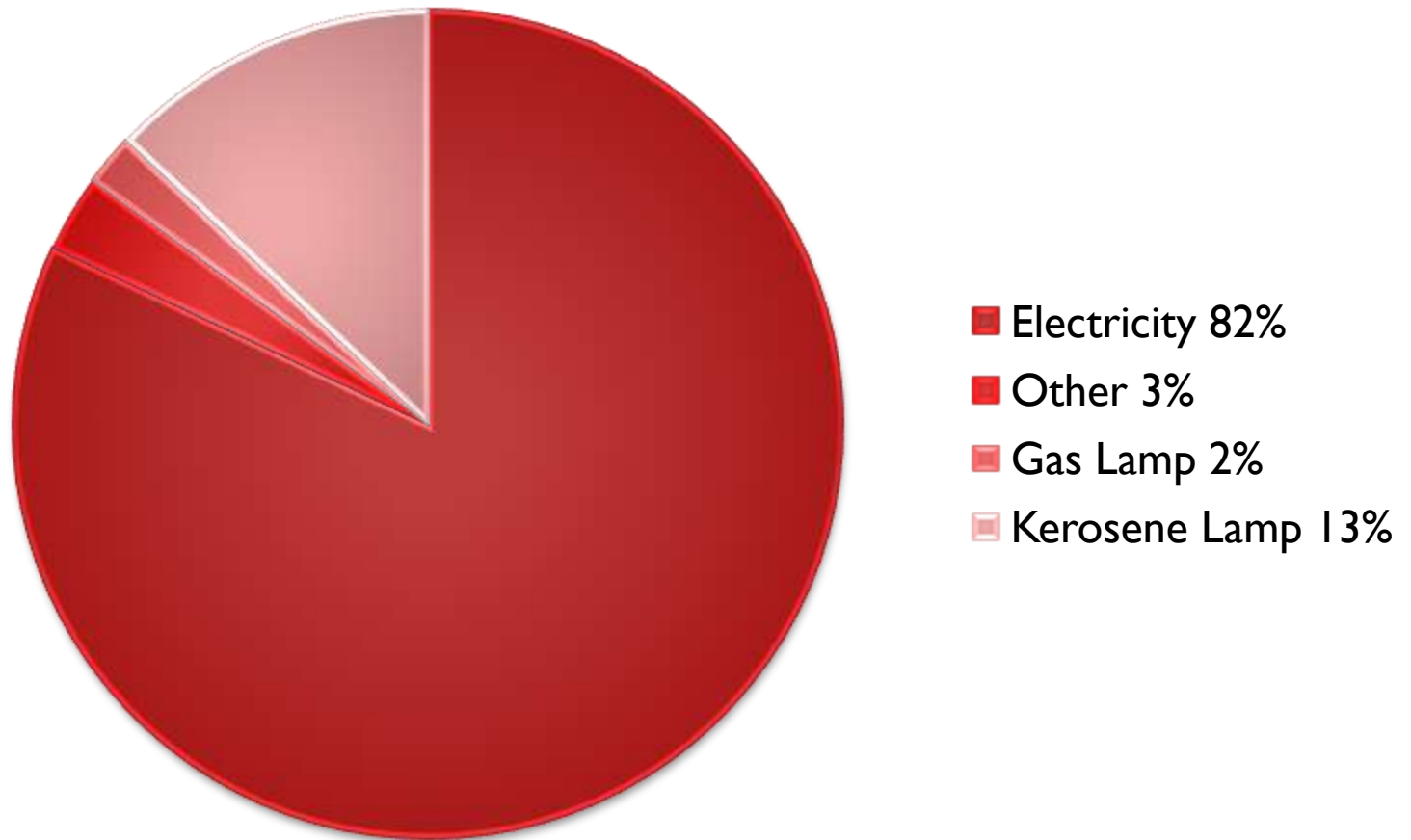


# Final Energy Use



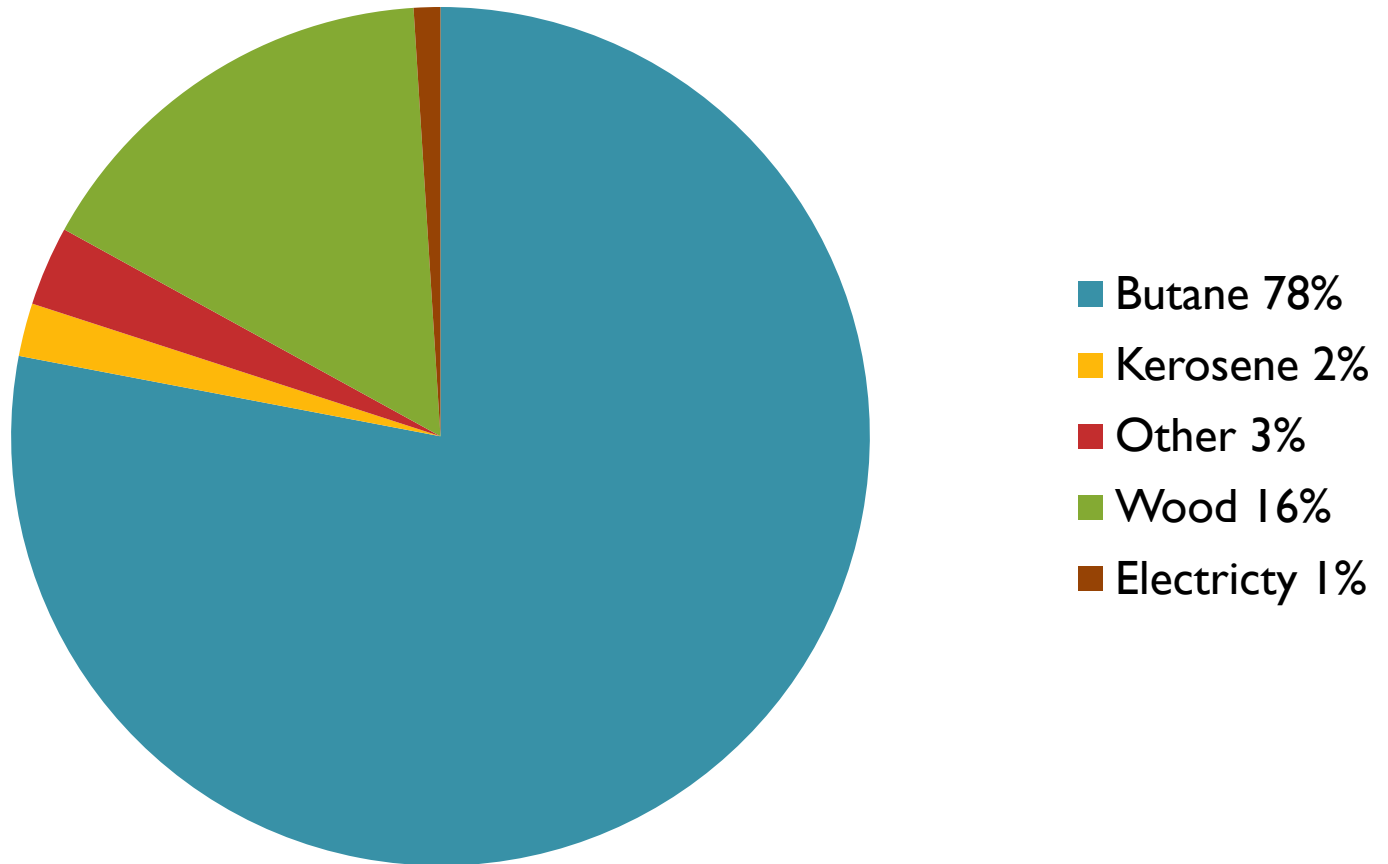
# Household Lighting

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# Household Cooking

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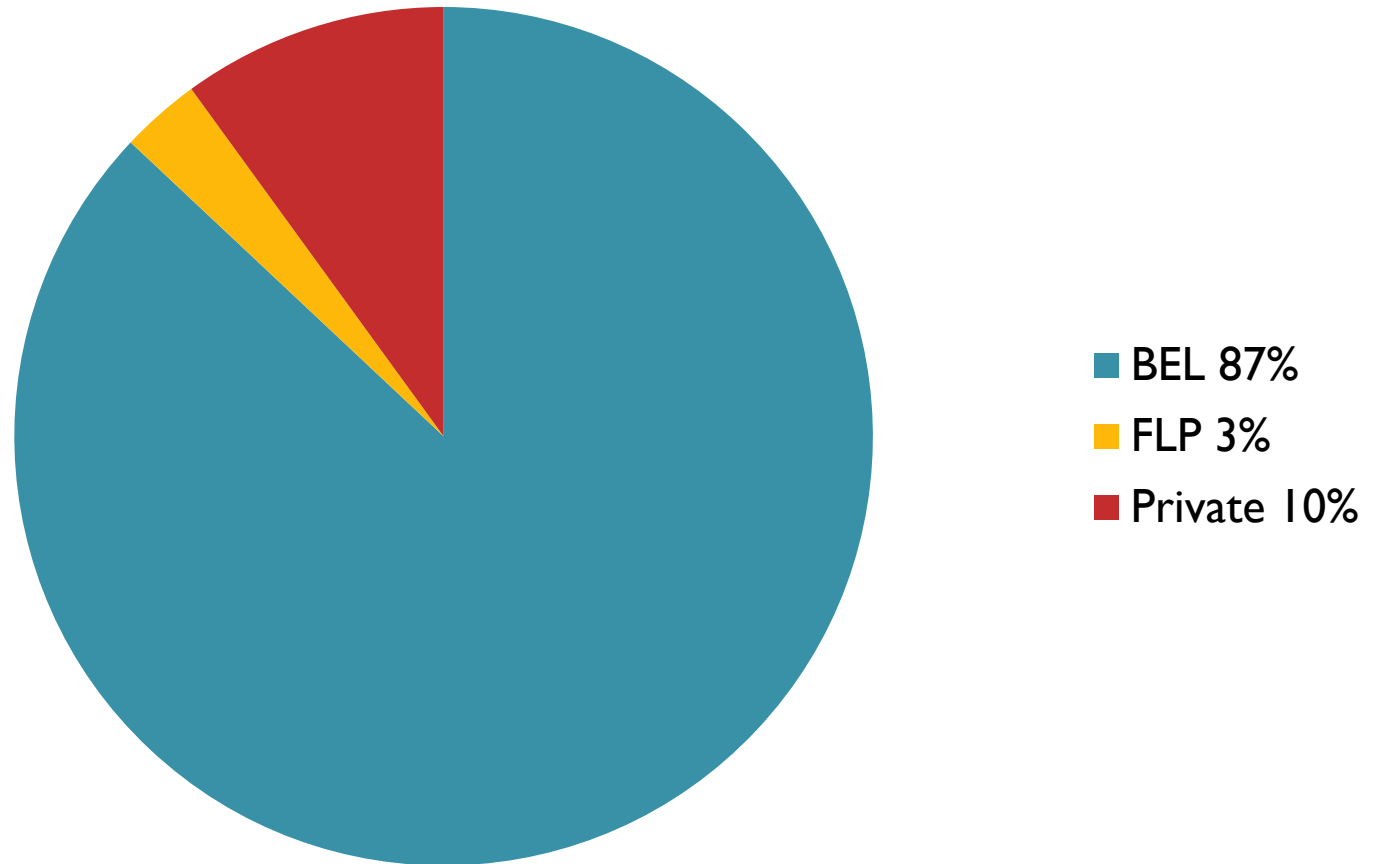
# Belize – An Oil Exporting Country

- 1.6 million barrels produced
- 1.3 million barrels exported
- 80% of oil produced is exported
- \$94.2 Million grossed
- Blue Sky local production
- Farmers Light Plant
- 20 Licence for exploration

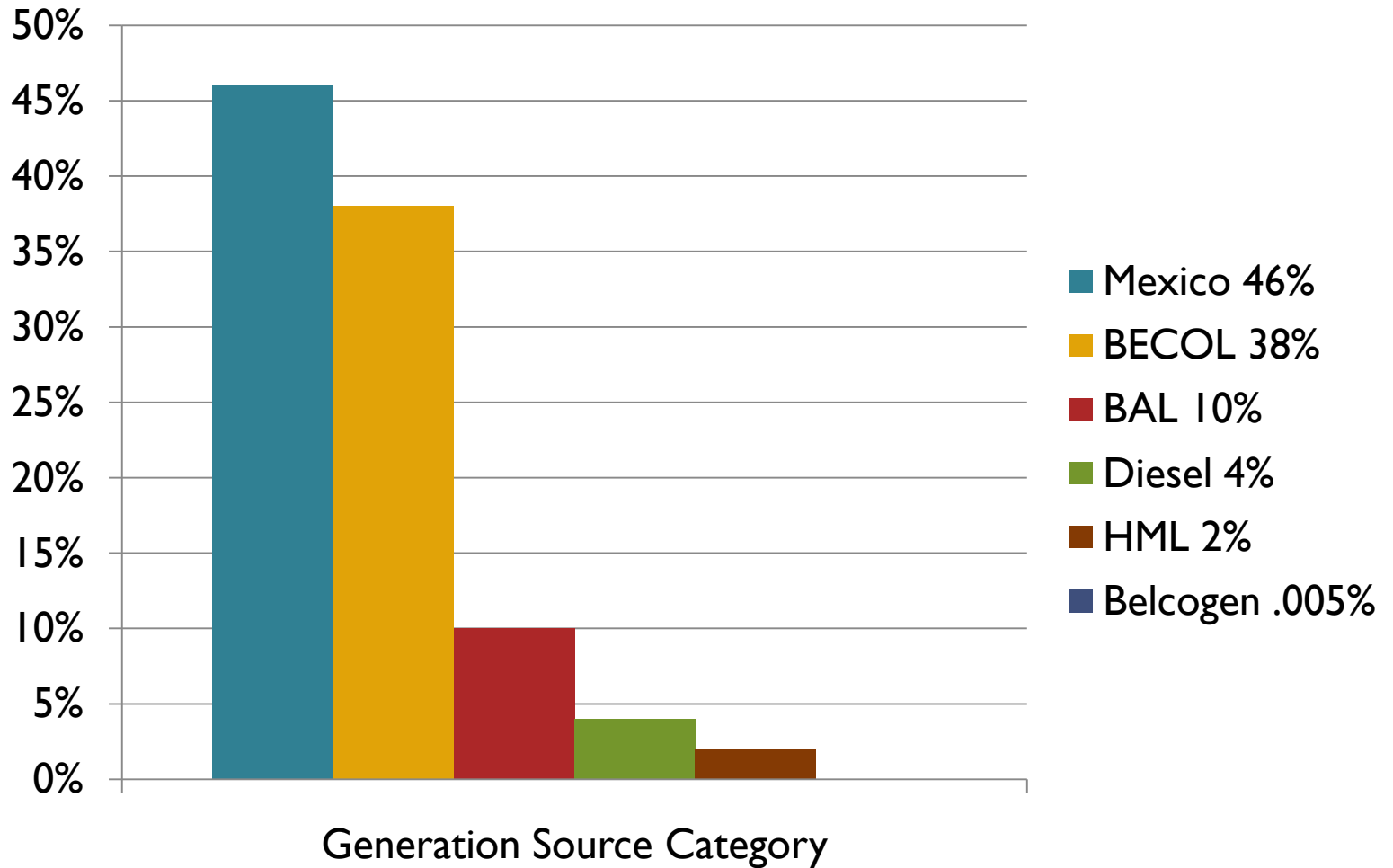
1 barrel = 42 US gallons

# Electricity Supply

## Electricity Supply

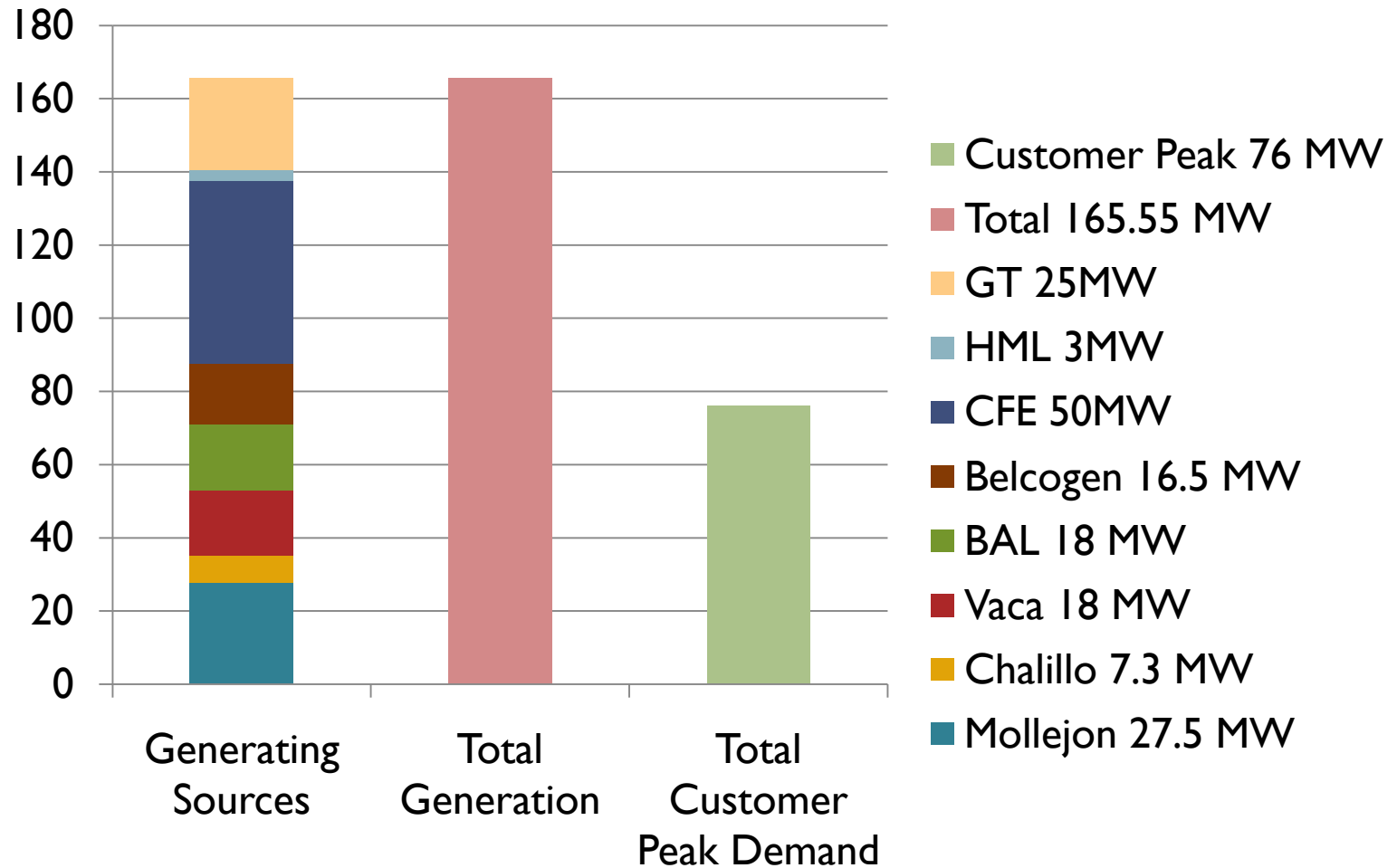


# Grid Sources – 2009





# Grid Installed Capacity



# Capacity Mix Considerations

- Chalillo and Mollejon is 35 MW
- Total BECOL is 53 MW
- Total In-Country Source is 115.55
- HML cannot be considered firm, but CFE is.
- BAL and Belcogen are not meeting capacity reliably
- Hydro Sources has been shown to give a bit more output as indicated but is weather dependent
- Firm In-Country Sources are therefore about 91 MW

# CFE Factor

- Security Risk ?
- Indexed to Crude Oil Prices
- No contract for firm capacity
- Contract Paid out in US Dollars
- Reduce local employment / social benefit
- Allows for reduced Capacity Reserve
- Extremely reliable
- Gas Technology
- Provide System Flexibility
- Provide for Future Opportunities

# Future Opportunities

- **Cross Border Electricity Trade**
  - Plan Puebla Panama
  - SIEPAC (Sistema de Interconexion Electrica de Paises de America Central)
- **Other Renewable Sources**
  - Wind
  - Geothermal
  - Municipal Waste
  - Solar – JICA, San Benito Poite, Solar Water Heaters
- **Demand Side Energy Management**
  - Energy Efficiencies
  - Consumer information

**Thank You!**



Sunday, 21 November 2010