

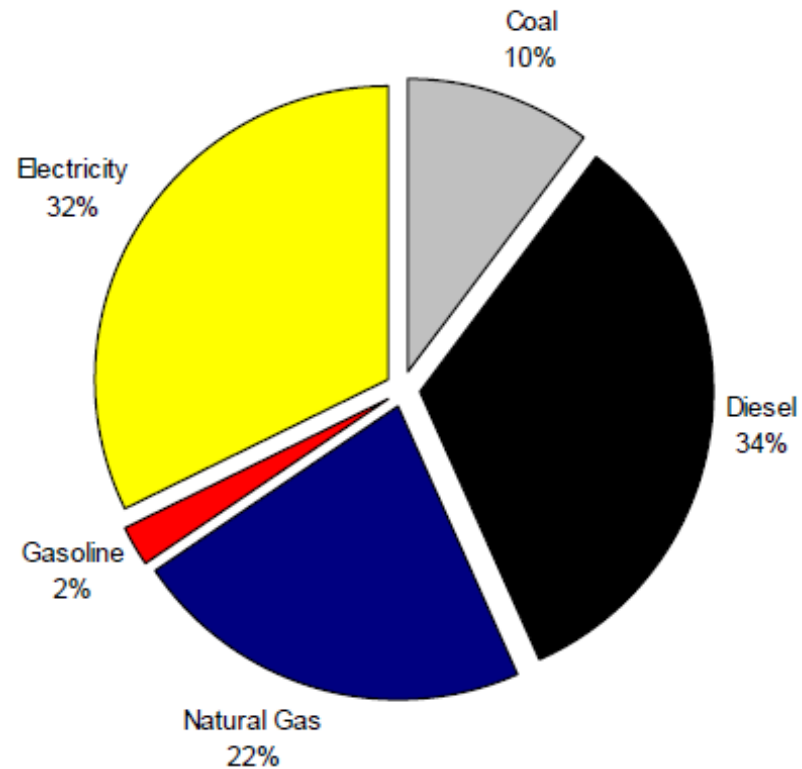
Innovative Approaches to Meeting Mining Industry Energy Needs

Presented by
Michael Sherman & Kate D'Ambrosio
IMA-NA Annual Meeting - Chicago
September 2017

WHY ARE WE HERE?

Energy –
a key
business
consideration

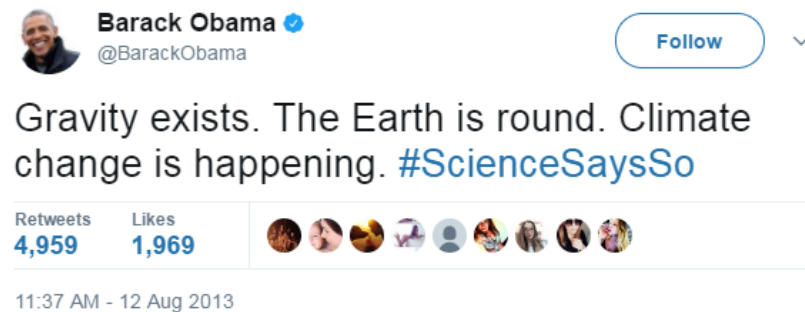
**Exhibit 4. Fuels Consumed in the U.S.
Mining Industry**



Source: USDOE "Mining Industry Energy Bandwidth Study" (June 2007)

WHY SHOULD YOU CARE?

External and Internal Policies



Costs

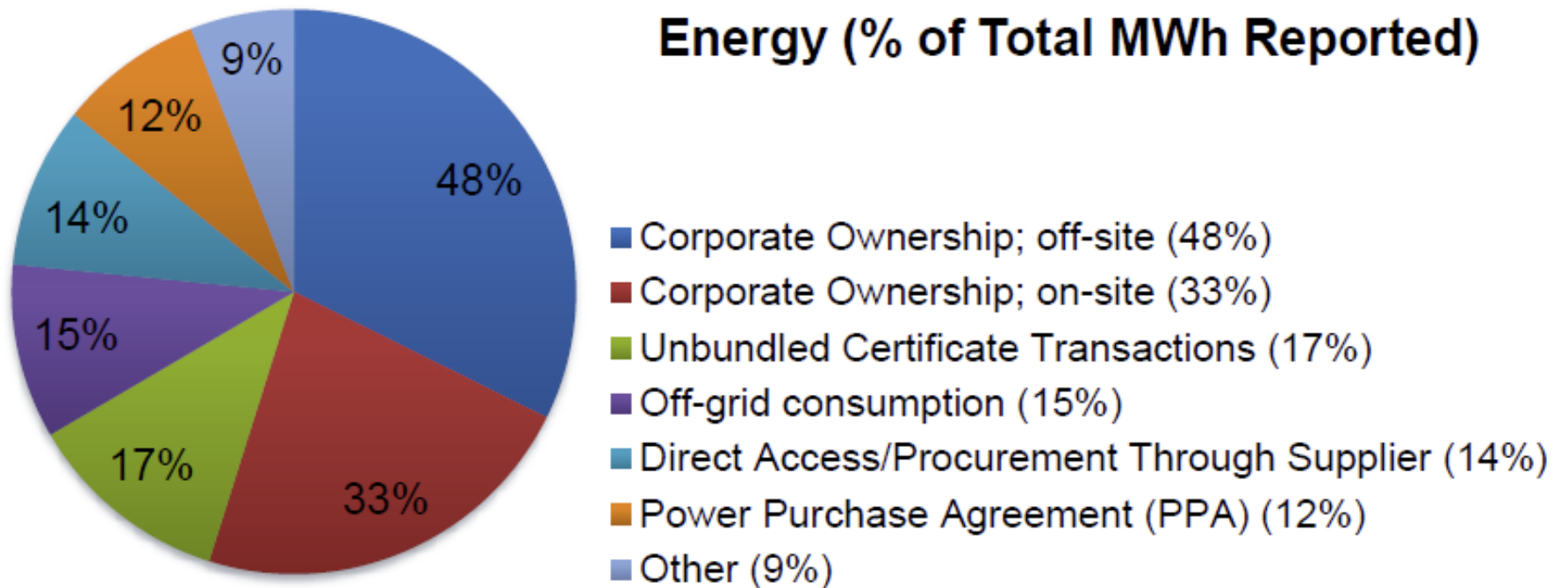
Reliability

Logistics

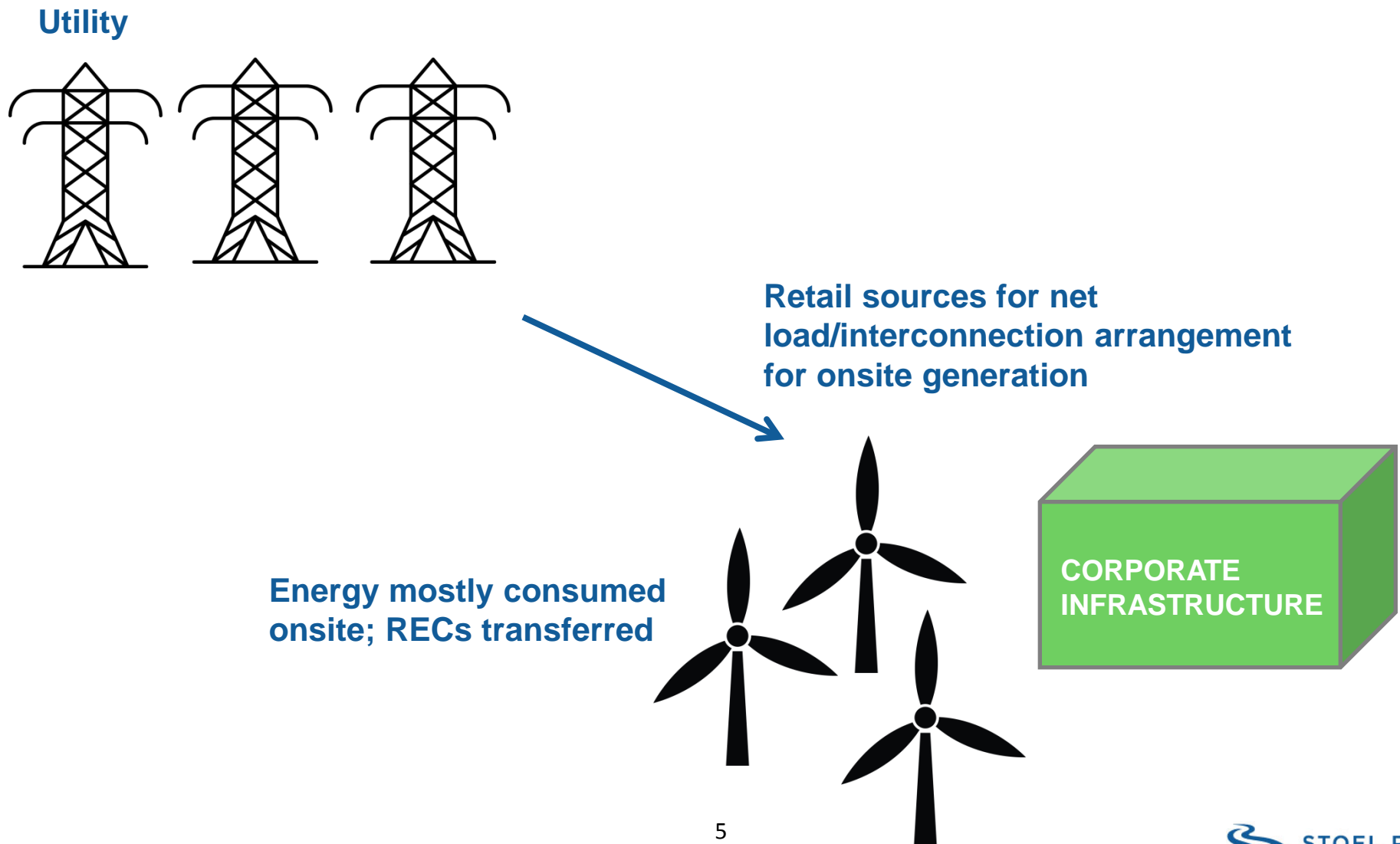
Corporate Sustainability

RENEWABLE ENERGY PROCUREMENT OPTIONS

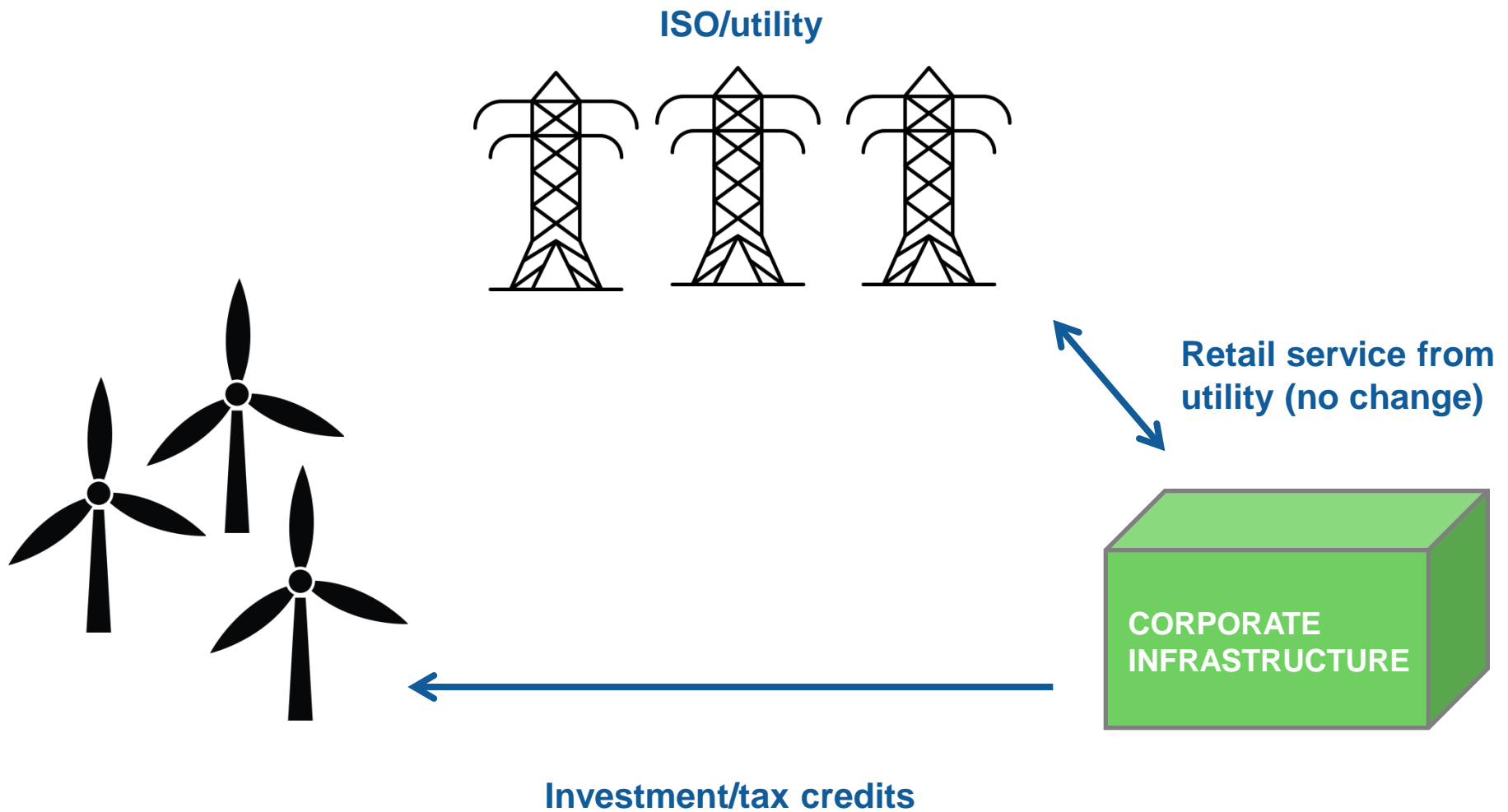
Mechanisms Used to Procure Renewable Energy (% of Total MWh Reported)



CORPORATE OWNERSHIP ONSITE OR ON-SITE PPA (RETAIL) WITH A THIRD PARTY, IF PERMITTED



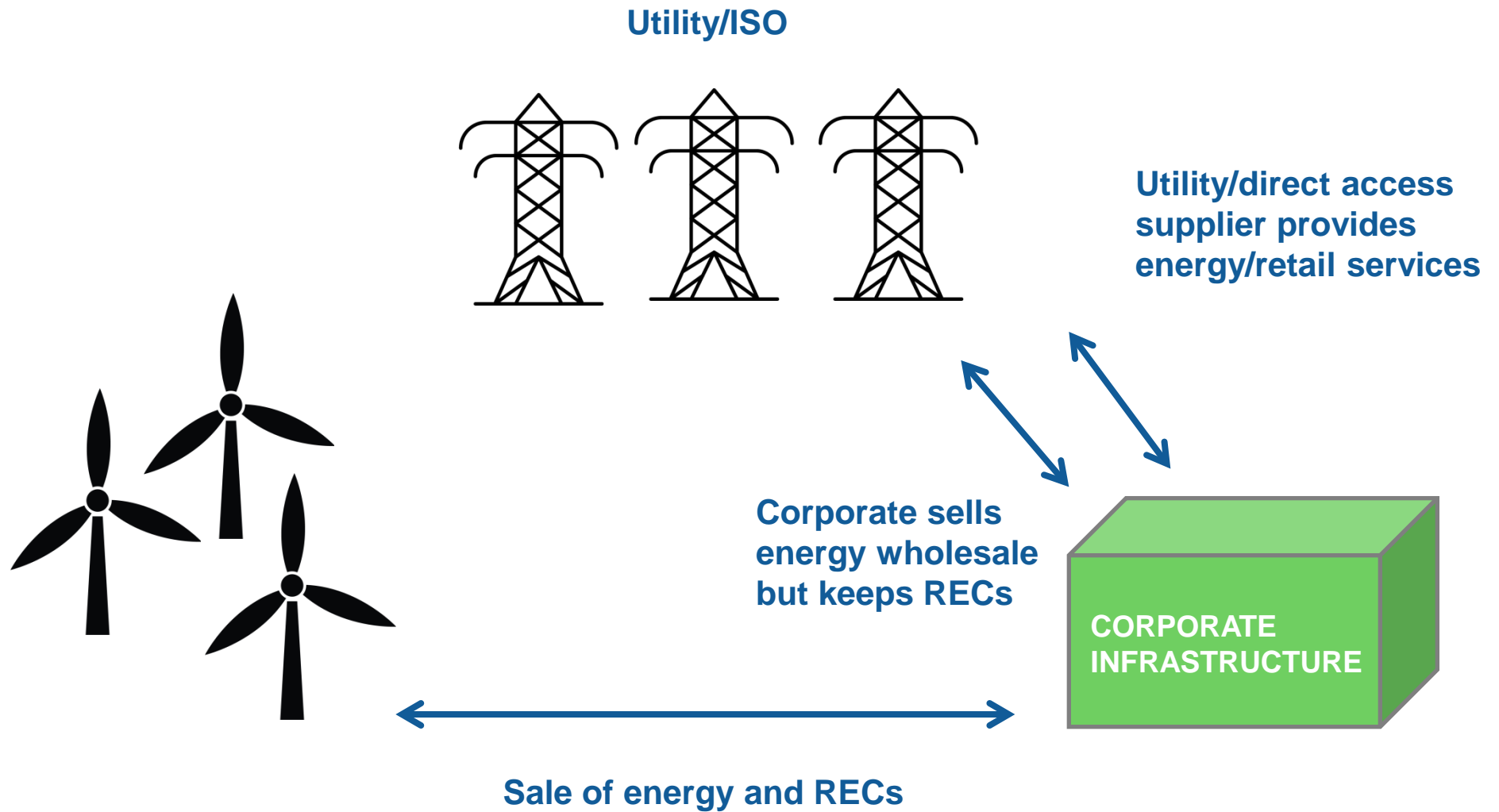
CORPORATE OWNERSHIP OFFSITE



CORPORATE OWNERSHIP: PROS/CONS

Pros	Cons
Control	Expense
Fixed costs (and potential savings)	Permitting
Reliability	Regulatory
Visibility	Performance risk
	Ongoing O&M

GREEN TARIFFS



PARTING THOUGHTS ...

- Integrating renewable energy presents many opportunities...and challenges.
- What's right for your business?

For the latest developments in energy, visit: <http://www.LawOfRenewableEnergy.com/>
Or look for Legal Insights related to mining and energy on www.stoel.com