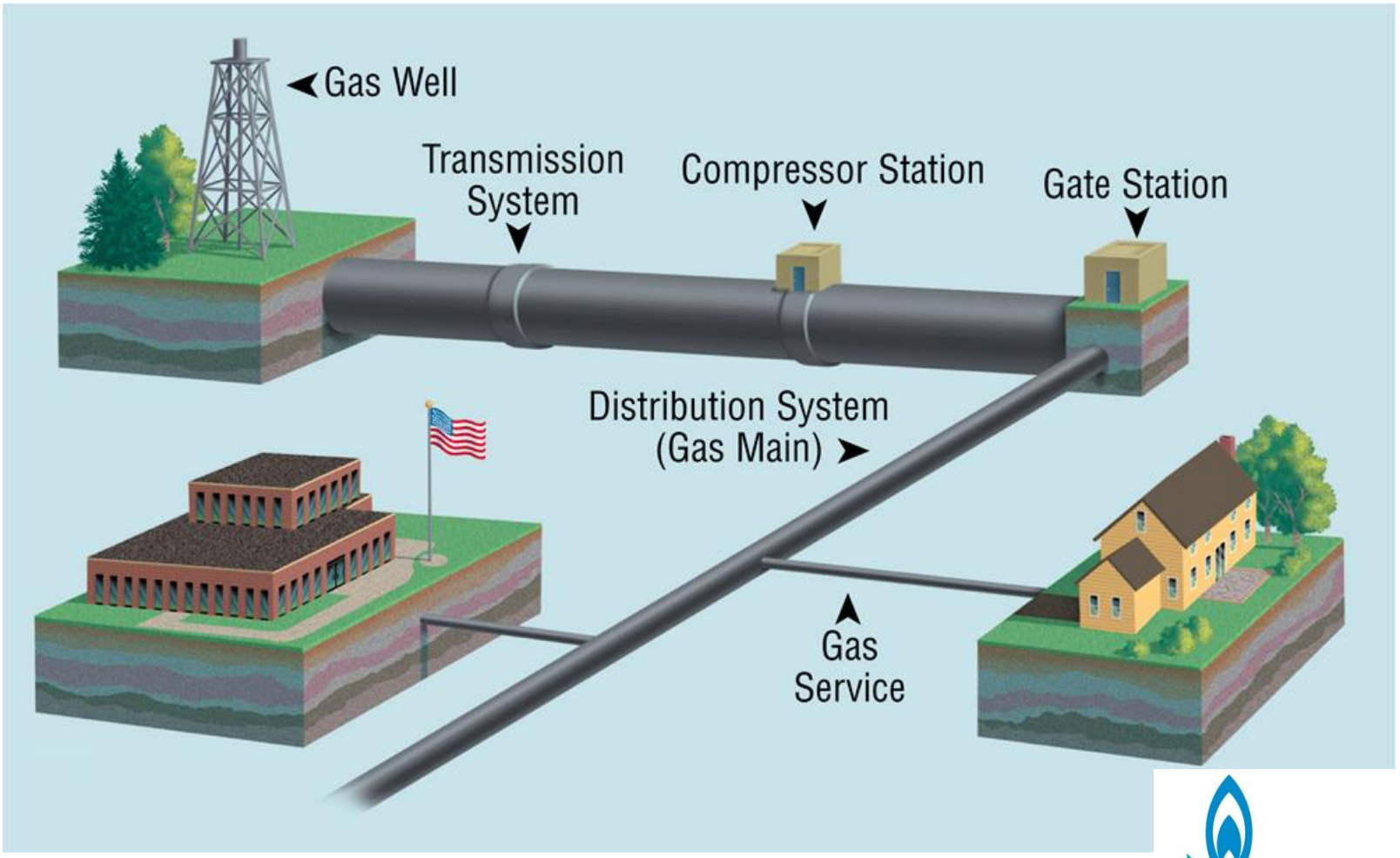
THE OHIO GAS MARKET

PRESENTED BY:
THE OHIO GAS SUPPLIERS ASSOCIATION
THE OHIO GAS ASSOCIATION
THE OHIO OIL AND GAS ASSOCIATION

FEBRUARY 3, 2015

From the well to your home



OHIO GAS ASSOCIATION

The Ohio Oil & Gas Association

Lunch and Learn

OOGA
Ohio Oil and Gas Association

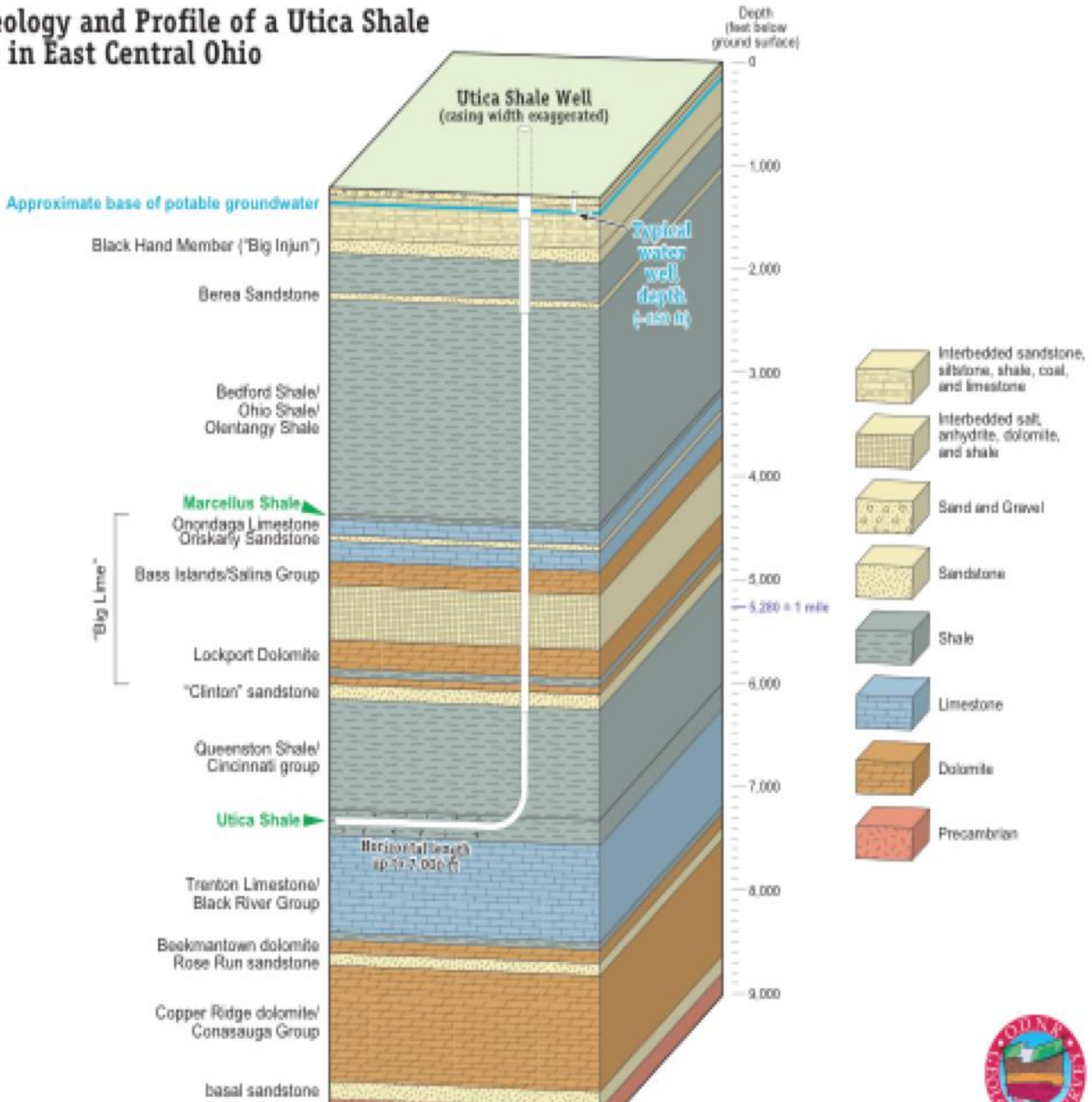
Ohio Oil and Gas Association

What is the Exploration & Production Industry

- The ultimate "upstream" sector that searches for, produces and develops crude oil and natural gas resources from underground reservoirs that have either generated or trapped the product.
- The goal is to establish, develop and expand "proven reserves"
  - The quantity of oil and gas believed with reasonable certainty to be recoverable from known reservoirs over a reasonable amount of time given existing commodity prices, technology and the costs to drill, develop and operate the properties, including regulatory and contractual costs.
- The fundamental law of the oil and gas business – Either Replace & Grow Reserves or Die:
  - Because existing wells deplete, the industry is sustained by the drilling of new wells. To be in the oil and gas business, one must both replace reserves produced and maximize the conservation and recovery of discovered deposits. Drilling for oil and gas is a high-risk enterprise. However, without new wells to replenish reserves, production will decline and the industry will liquidate.
- You can replace reserves with the drill bit or the checkbook.

Ohio Oil & Gas

- 30 distinct geologic formations produce oil and gas
- Ranging in age from Cambrian (488 million years age) to Late Pennsylvanian (299 million years age)
- Depths from 50 feet to as deep as 9,100 feet



Then

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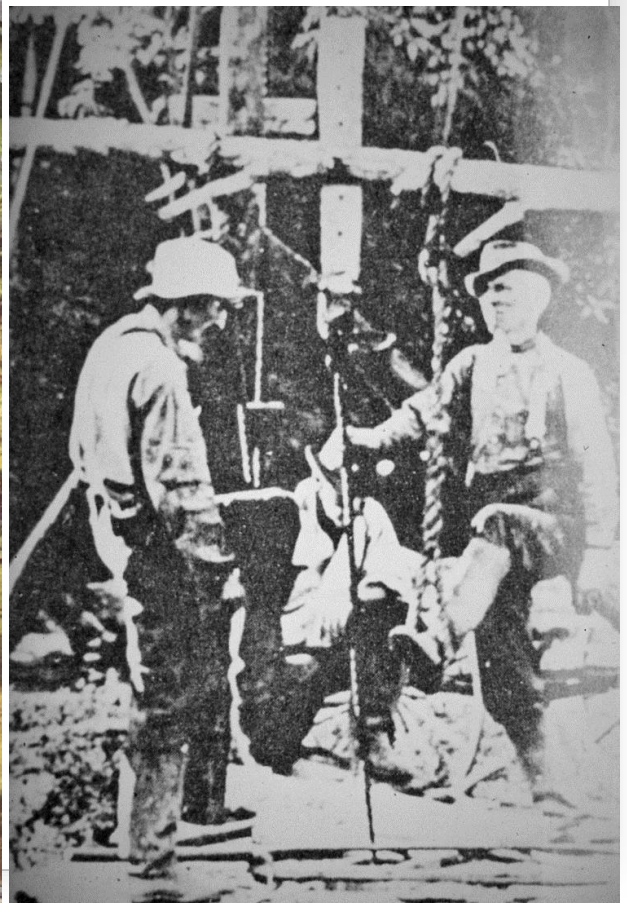
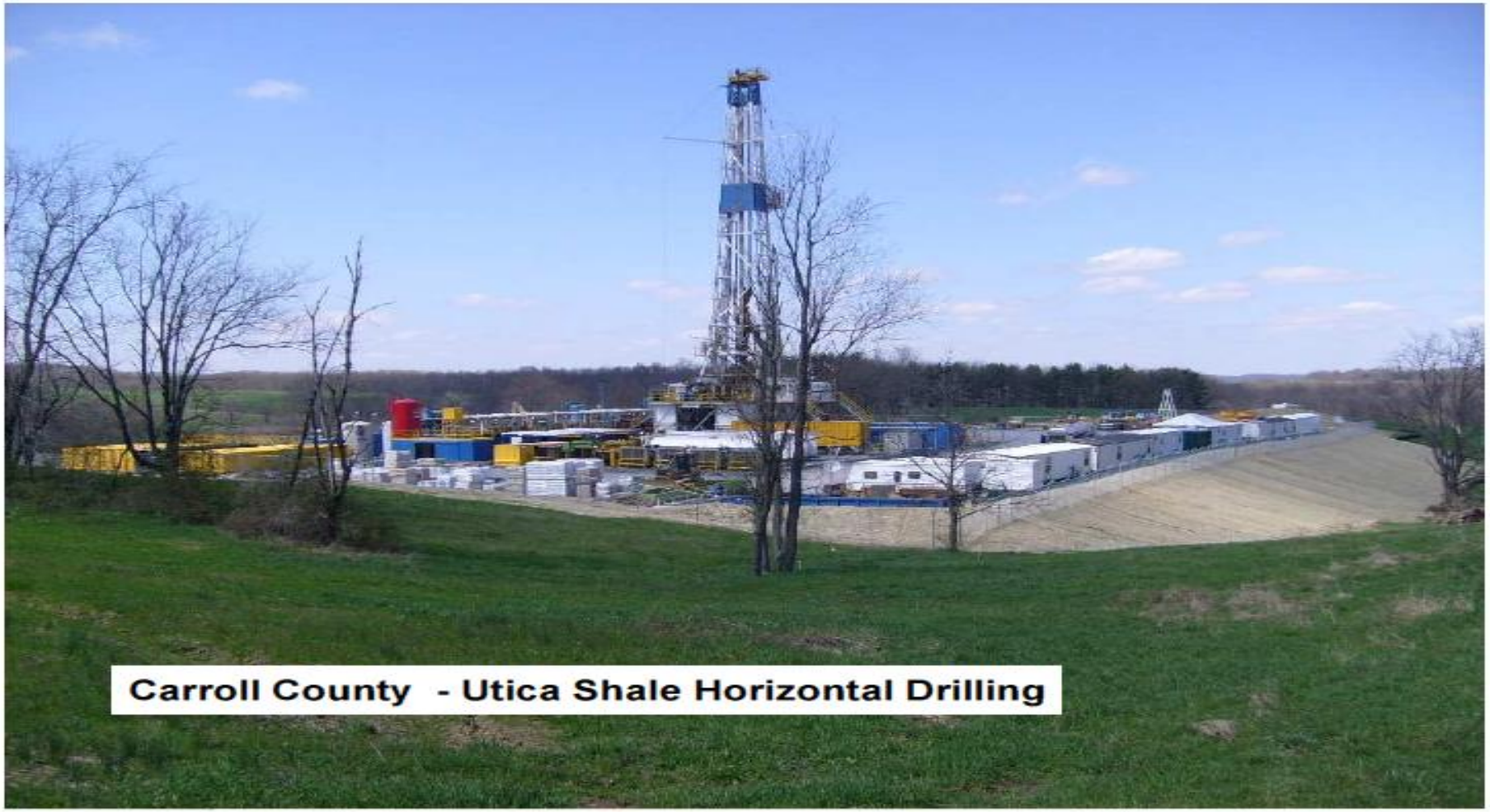
Spring Pole Drilling



Now

Ohio Oil and Gas Association



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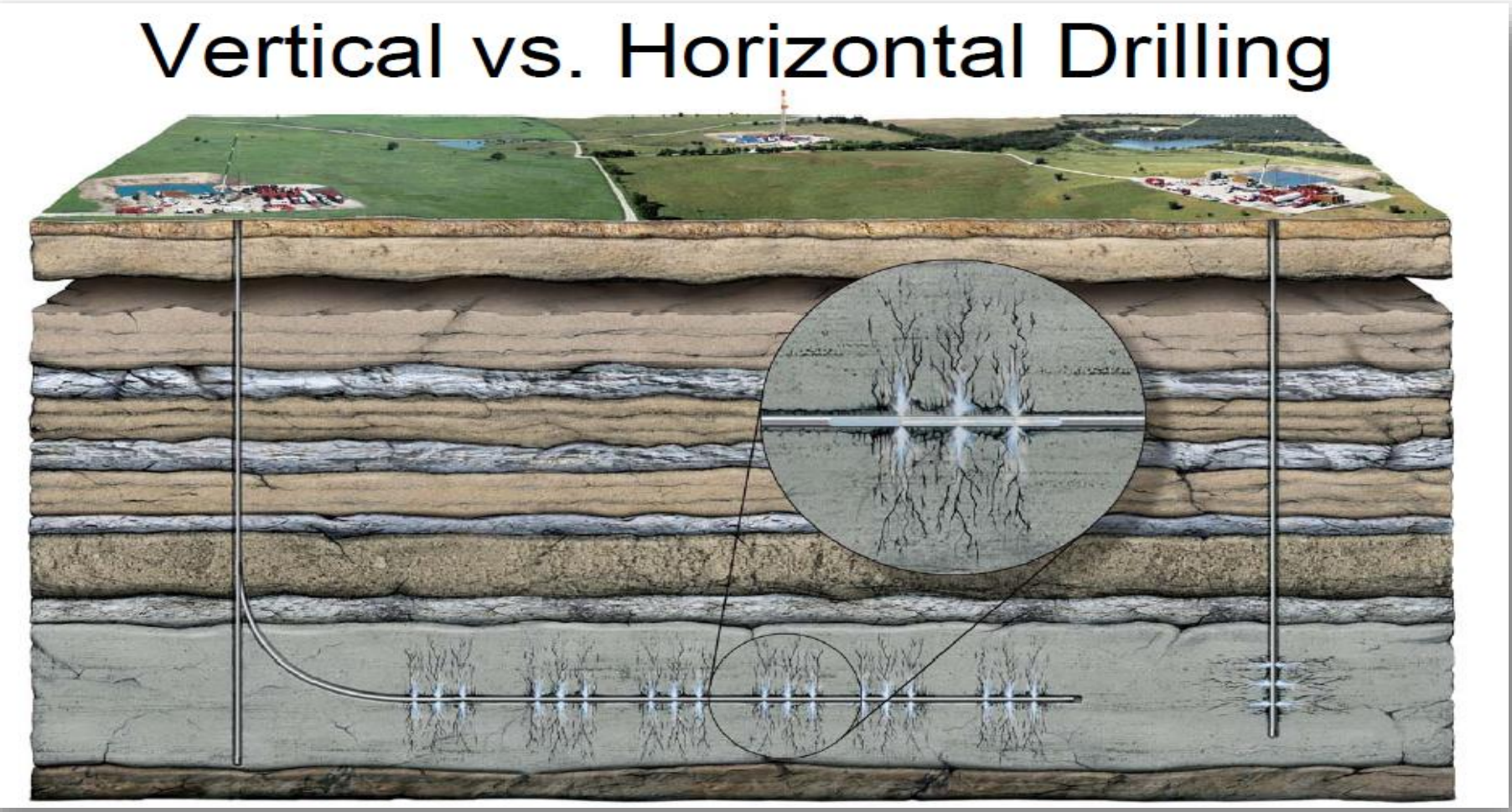
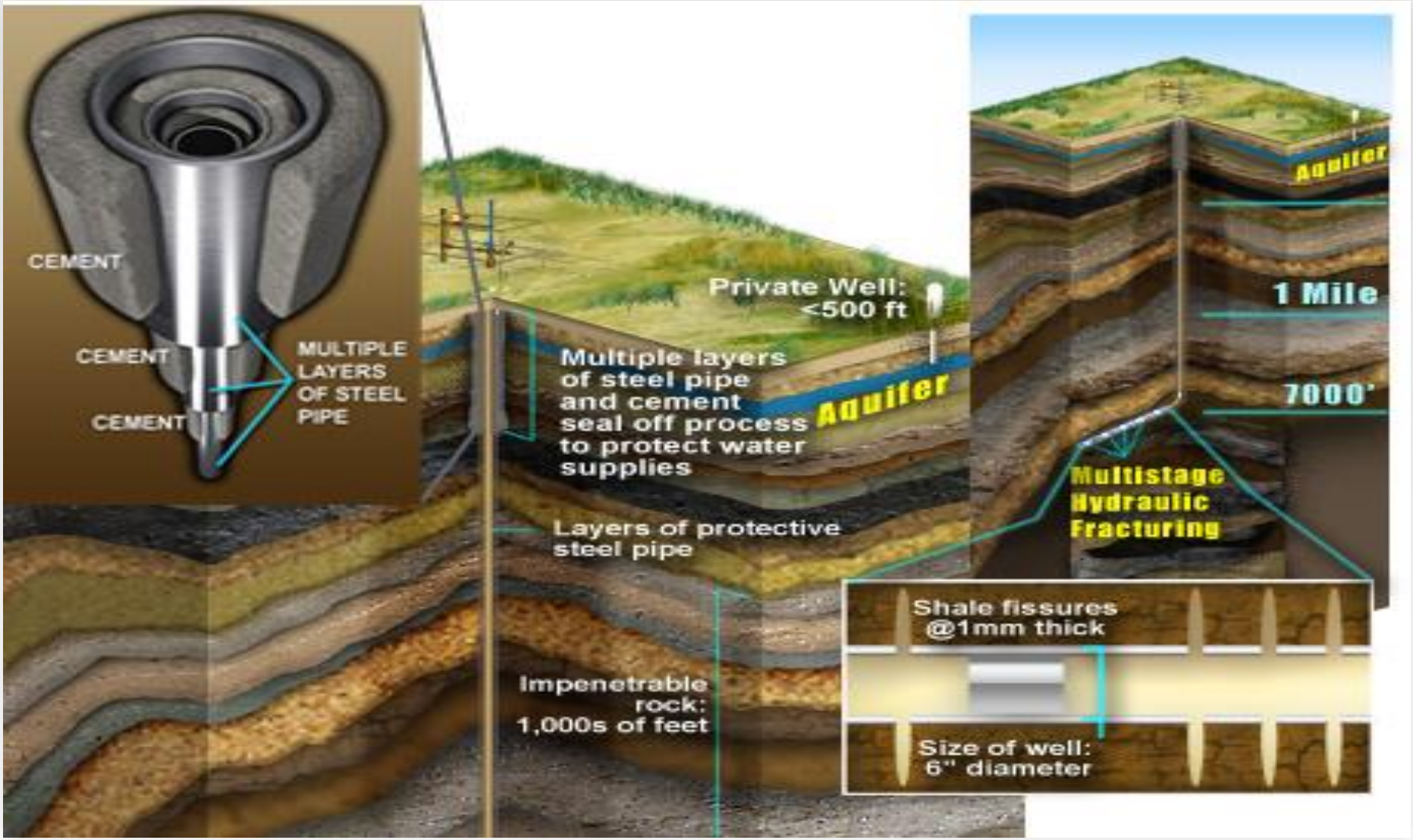
Horizontal Drilling



Source: IOGA-PA (May 12, 2008)

What Really Matters- Well Construction



63,000 wells in production today

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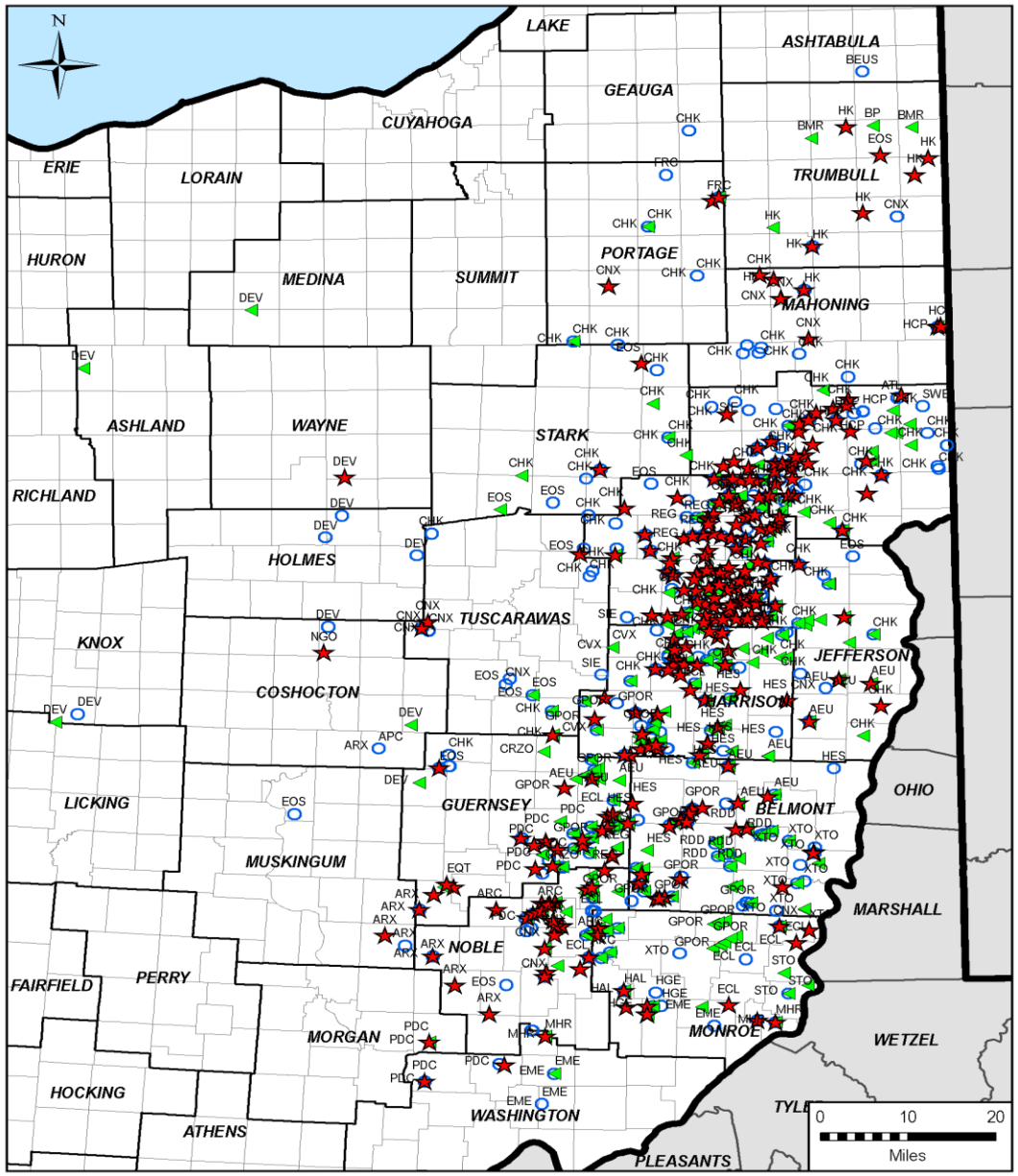
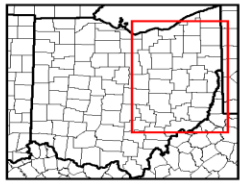


UTICA HORIZONTAL WELL STATUS THROUGH 1/3/2015

- PRODUCING (713)
- DRILLING; DRILLED (577)
- PERMITTED OR NOT DRILLED (453)

OPERATOR	LBL	PROD	PMT	DRLG	DRLD	TOT
AMERICAN ENERGY UTICA LLC	AEU	16	30	48	19	113
ANADARKO E & P ONSHORE LLC	APC	0	1	0	0	1
ANTERO RESOURCES CORPORATION	ARC	37	20	58	10	125
ARTEX OIL COMPANY	ARX	6	4	0	0	10
ATLAS NOBLE LLC	ATL	8	4	0	0	12
BEUSA ENERGY LLC	BEUS	1	0	0	0	1
BP AMERICA PRODUCTION COMPANY	BP	0	1	0	0	1
BRAMMER ENGINEERING INC	BMR	0	2	0	0	2
CHESAPEAKE EXPLORATION LLC	CHK	398	152	29	164	743
CNX GAS COMPANY LLC	CNX	25	9	5	8	47
CARRIZO (UTICA) LLC	CRZO	4	10	1	1	16
CHEVRON APPALACHIA LLC	CVX	0	3	7	0	10
DEVON ENERGY PRODUCTION CO	DEV	2	5	2	4	13
ECLIPSE RESOURCES I LP	ECL	28	25	30	9	92
EM ENERGY OHIO LLC	EME	0	3	3	0	6
ENERVEST OPERATING LLC	EOS	2	18	1	1	22
EQT PRODUCTION COMPANY	EQT	2	4	1	1	8
MOUNTAINEER KEYSTONE LLC	FRC	5	2	0	1	8
NGO DEVELOPMENT CORP	NGO	0	0	1	0	1
GULFPORT ENERGY CORPORATION	GPOR	84	59	37	31	211
HALL DRILLING LLC (OIL & GAS)	HAL	0	0	8	0	8
HILCORP ENERGY COMPANY	HCP	7	14	4	1	26
HESS OHIO DEVELOPMENTS LLC	HES	27	17	7	17	68
HG ENERGY LLC	HGE	5	7	4	3	19
HALCON OPERATING COMPANY INC	HK	6	3	1	3	13
TRIAD HUNTER LLC	MHR	7	6	5	0	18
PDC ENERGY INC	PDC	14	4	15	3	36
RICE DRILLING D LLC	RDD	7	12	8	3	30
R E GAS DEVELOPMENT LLC	REG	20	13	8	0	41
SIERRA RESOURCES LLC	SIE	2	0	0	1	3
STATOIL USA ONSHORE PROP INC	STO	0	0	1	2	3
SWEPI LP	SWE	0	0	0	1	1
XTO ENERGY INC.	XTO	5	20	3	7	35
	TOTALS	718	448	287	290	1743



KEY	DESCRIPTION
PROD	PRODUCING
PMT	PERMITTED
DRLG	DRILLING
DRLD	DRILLED

SHUMWAY RESOURCES, LLC
137 E Dublin Granville Rd, Ste E
Worthington, Ohio 43085 | (614) 846.1391
www.shumwayresources.com

Local Distribution Company "utility" - 101

Jimmy Stewart
President OGA

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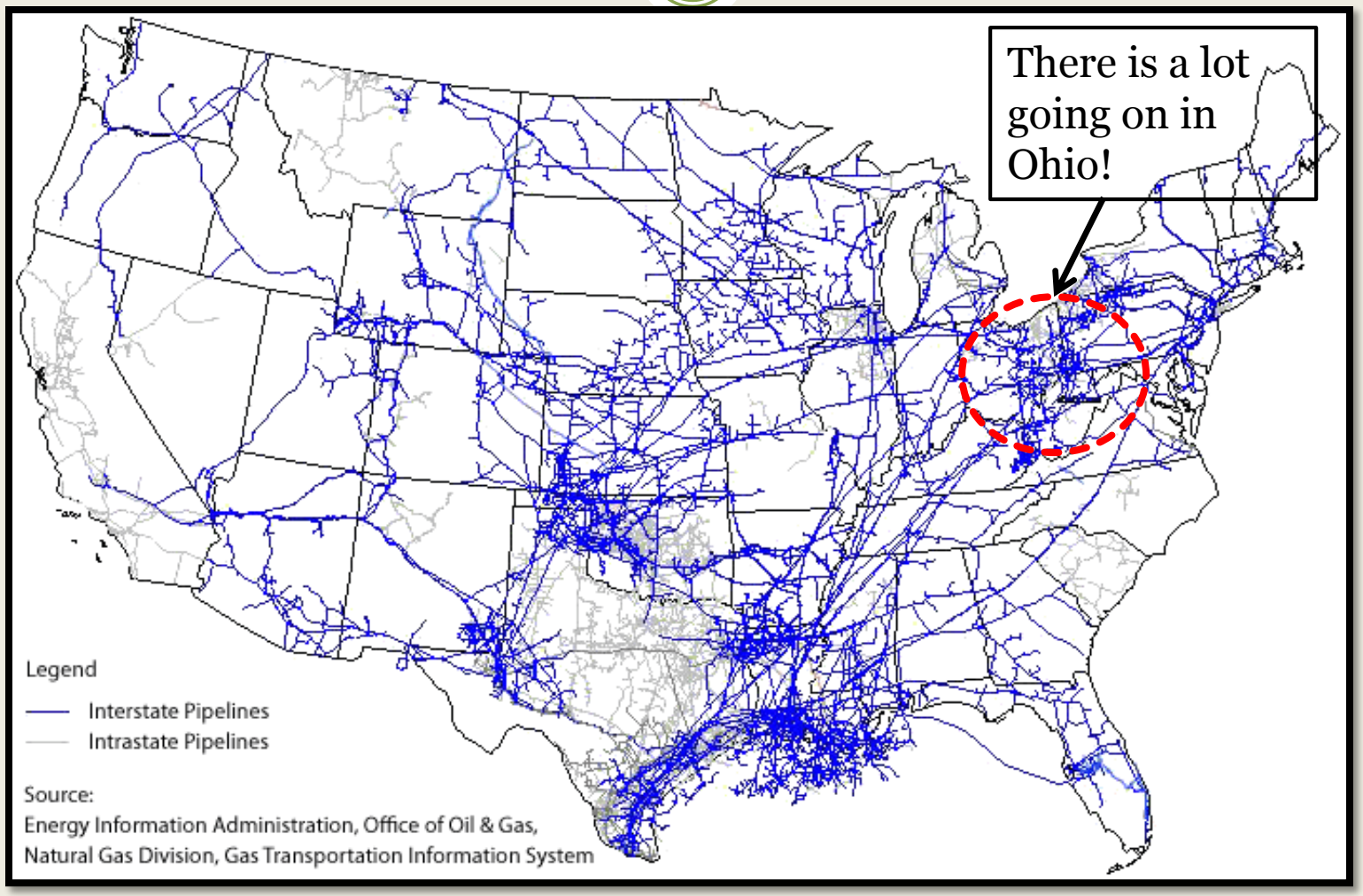
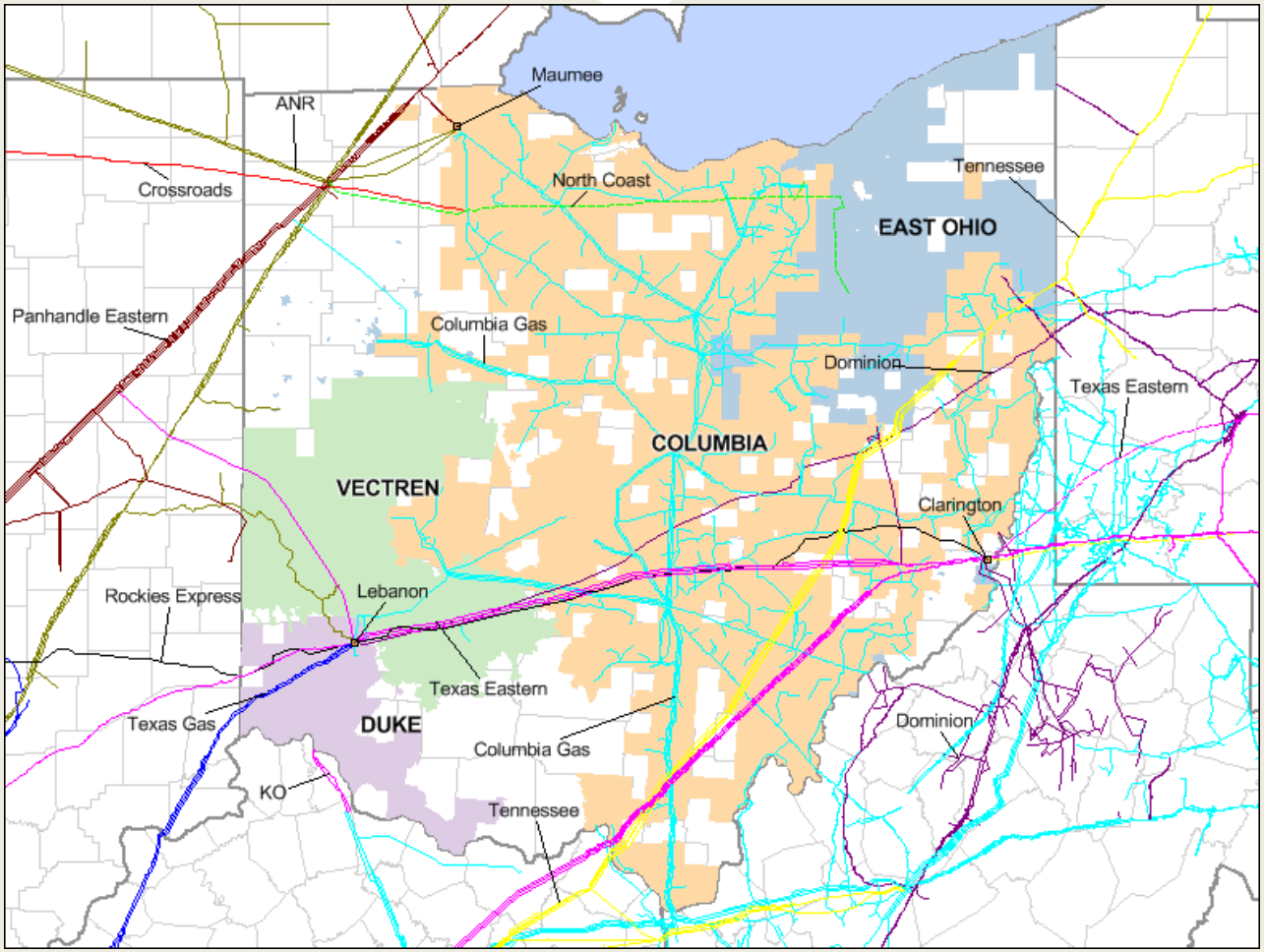
Map U.S. Pipelines



Ohio Pipelines By Major Utility Territory



Historic Model

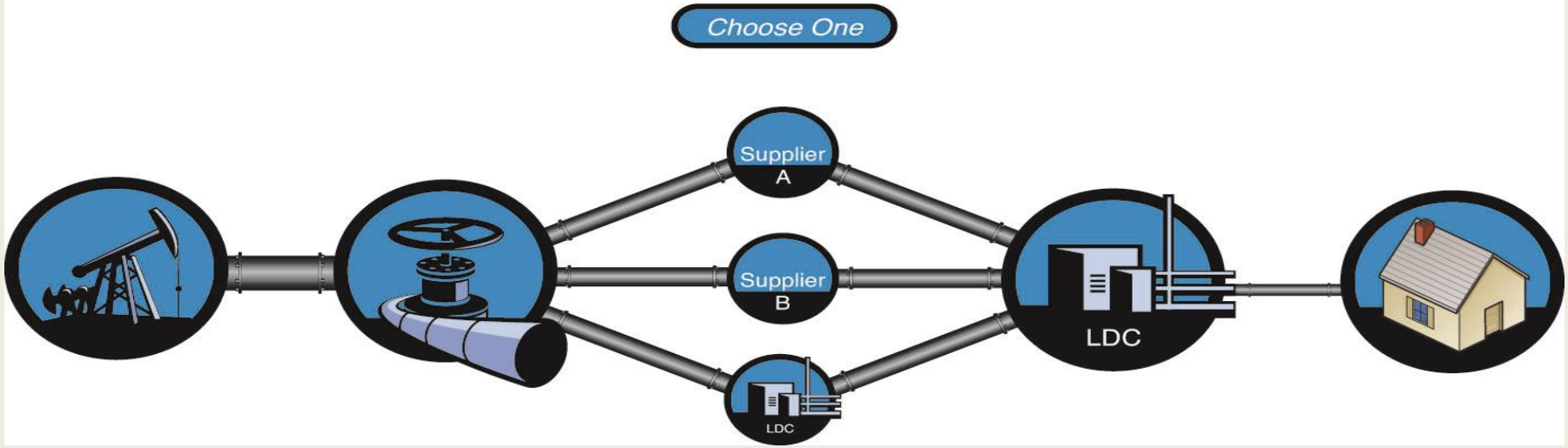
Producer | Interstate Pipeline | Supply Management | Local Distribution Company | Consumer

Marketplace Transition

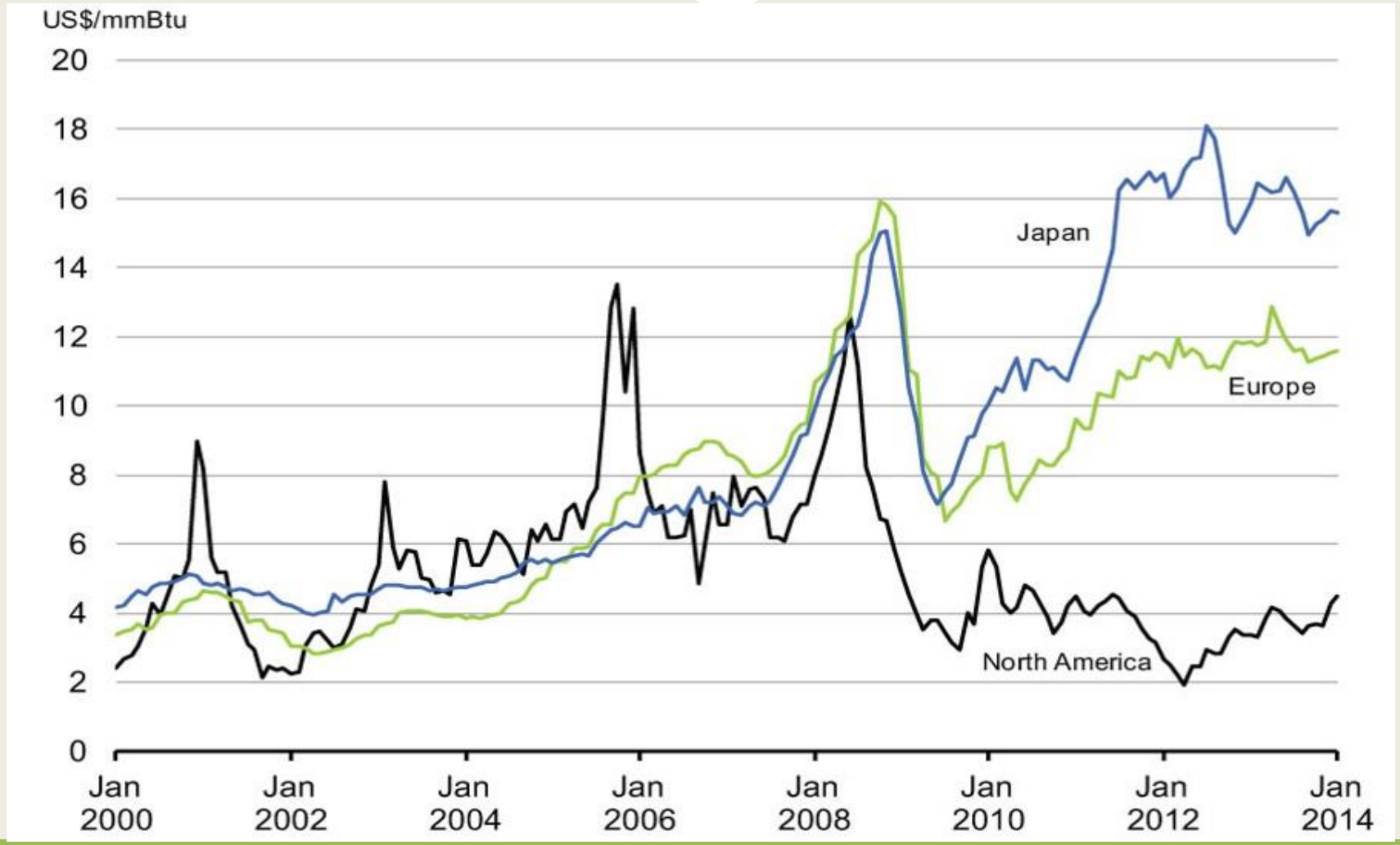
1997	• CHOICE Program – Northwest Ohio
1999	• CHOICE Program – Statewide Expansion
2001	• HB 9 – Municipal Aggregation
2006	• SSO Auction
2009	• SCO Auction
2013+	• Transition to a Fully Competitive Market

Competitive Model

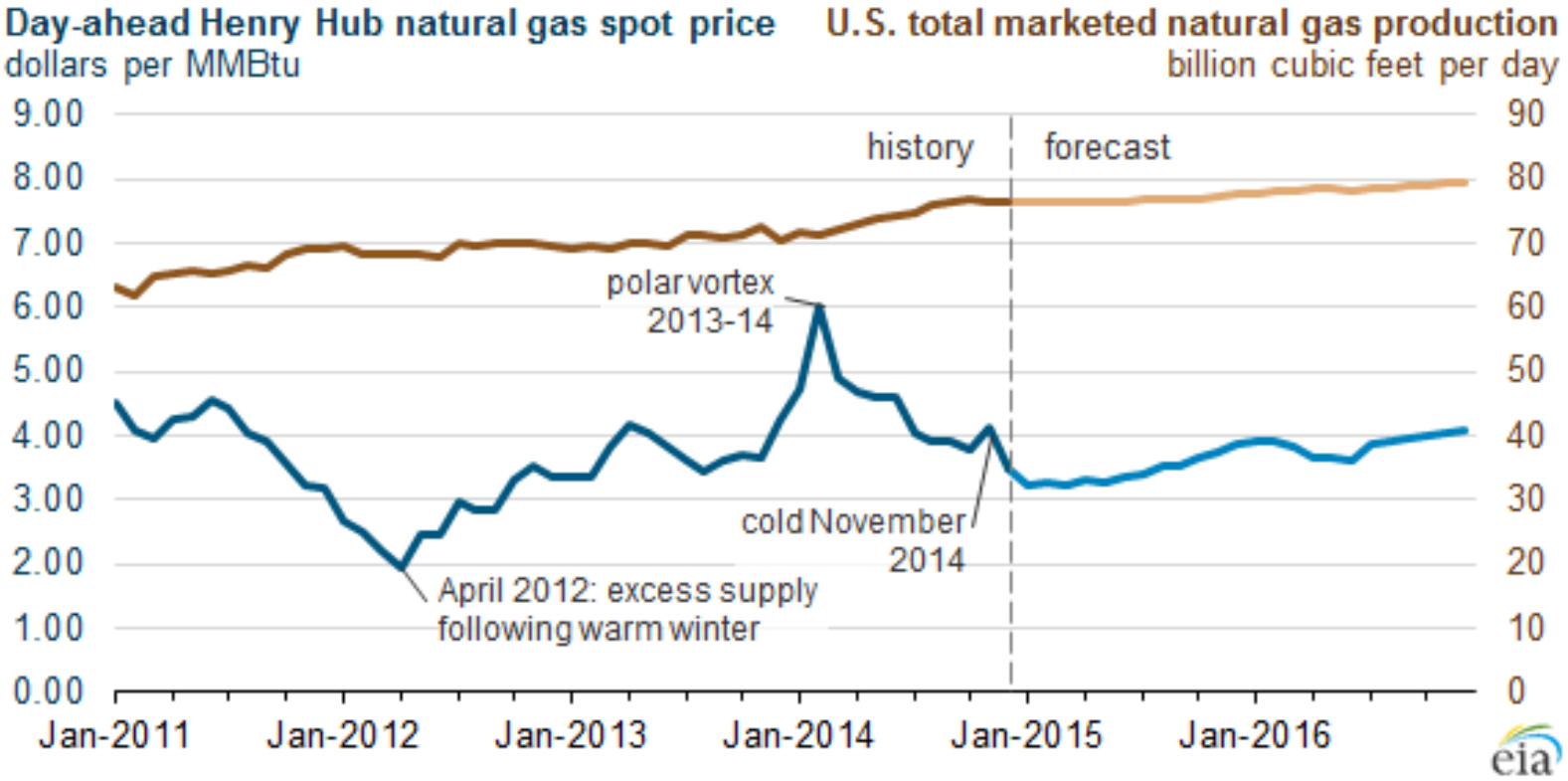
Producer | Interstate Pipeline | Supply Management | Local Distribution Company | Consumer



Global Natural Gas Prices



Natural gas price projections are significantly lower than past years due to an expanded shale gas resource base



Natural Gas Choice

THE TRANSITION FROM REGULATED MONOPOLY SERVICE TO COMPETITION

MATTHEW WHITE

OGSA/IGS ENERGY

Past, Present, Future of Ohio Market

Gas Cost Recovery (GCR)	• Utility contracts for gas • True cost is unknown until after all usage occurs; prior period adjustments for differences distorts current price with true-ups • Customers do not see contracted parties on bill • This model is still used by Duke Energy of Ohio
Standard Choice Offer (SCO)	• Suppliers bid in a retail auction for adder • Price is based on real-time competitive market plus the PUCO-approved adder • Price varies monthly and entirely exposed to market conditions • Utility does not supply commodity • Customers see winning supplier on bill • This model currently used in Vectren, Columbia, and Dominion
Full Competition	• Utility maintains pipelines and is provider of last resort • All customers are served by Competitive Suppliers • Sends proper market signals to Competitive Suppliers for long-term investments in Ohio marketplace

Who can choose?

- Choice: Typically residential and small commercial customers who use under 500 MCF or less (also called non-mercantile)
  - They must be current on their utility bill or payment plan
  - Cannot be in PIPP (low income payment program)
- Transport: Typically a mercantile customer that consumes, other than for residential use, more than five hundred thousand cubic feet of natural gas per year. (Each utility transport threshold varies)

Certified Retail Natural Gas Service– "CRNGS"

- In order to sell to Choice customers in Ohio a supplier must obtain a license and become a Certified Retail Natural Gas Service Provider
  - PUCO evaluates financial security, expertise in the industry, and history of complaints
  - PUCO regulates rates and tariffs for utilities which includes the tariff that CRNGS providers must follow
  - PUCO regulates marketing practices and licensing of CRNGS providers
  - PUCO ensures compliance with state energy policy as market transitions to full competition
- CRNGS providers are NOT just "Marketers" – we are traders, schedulers, pipeline contracted suppliers of natural gas

Producer + Pipeline + Utility + CRNGS = CHOICE

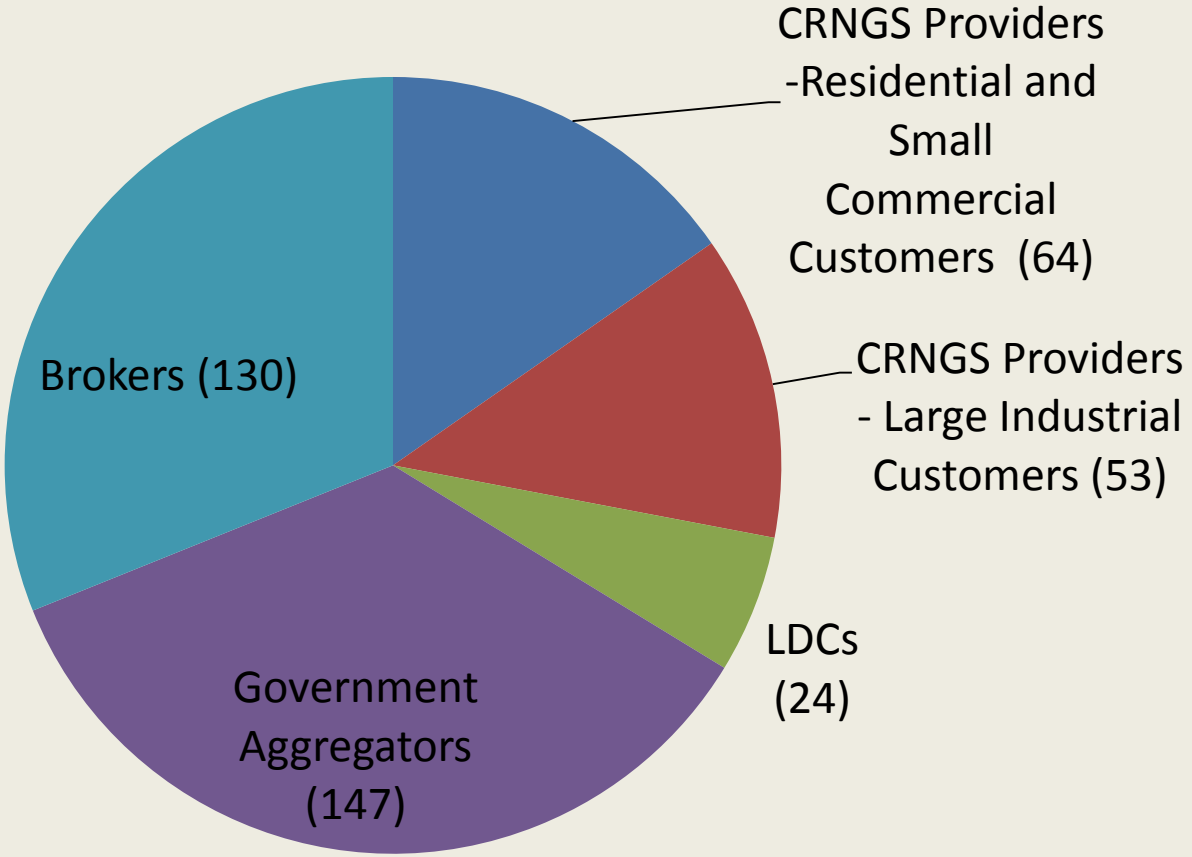
Without a partnership Choice doesn't work:

- CRNGS providers must contract with local utility
- CRNGS providers and utilities communicate daily to ensure reliable gas flow
- Pipelines impose penalties on utilities and CRNGS providers if gas is not delivered properly
- If CRNGS providers do not properly deliver gas the utility can assess them penalties

What's Next for Ohio?

TERESA RINGENBACH
CHAIRWOMAN OGSA

Downstream Gas Industry Market



*Based on PUCO Data

A True Competitive Market

PUCO approved two plans that could transition Ohio to a fully competitive market:

- local utilities continue to provide reliable gas distribution and maintain pipelines
- CRNGS providers bring innovative products and services to market

Utility Exit from Merchant Function

- Customers who do not affirmatively choose a supplier are assigned to a Supplier
- Suppliers are required to serve all customers on system who need natural gas
- Customers pay Monthly Variable Rate (MVR)

Dominion East Ohio Gas (DEO)

- On April 1, 2013 non-residential customers who do not affirmatively choose a supplier will be assigned to a monthly variable rate (MVR) supplier
  - MVR supplier rates cannot exceed the lowest monthly variable rates posted on the PUCO apples to apples chart
  - We are going on two years and no complaints
- Stakeholders are studying the results of the non-residential exit of the merchant function
- A filing for residential will not be effective prior to 2015 and DEO agrees not to file prior to 2015 to exit the merchant function for residential customers

Columbia Gas of Ohio (COH)

- Non-residential customers who have not chosen a supplier will be assigned to an MVR supplier the April following 70% switching for 3 consecutive months
- COH will begin sending letters and consumer education pieces to customers so they will understand the transition as we get closer to threshold
- Once exited non-residential customers will receive service from a competitive supplier at Monthly Variable Rate (MVR)

Today Customize Your Bill: Its Your Choice

Flat Bill : Fix the total amount due regardless of how much you use (no true-up).
- no need to know what a CCF or MCF is

Control Your Electric Bill: Combined heat and power fueled by natural gas

Fuel Your Car: Compressed natural gas refueling

- Public stations
- On site (e.g. residential refueling from the garage)

Rewards: fuel perks? air miles? How about $25 for every year you stay a customer?

Smart Thermostat: get a free thermostat for free + energy efficiency

Whole home: add electric, discounts for double fuel, fix your furnace, stove, etc. with free or discounted service warranty programs.

Green or local: buy local with gas from Ohio, buy green with landfill gas.

QUESTIONS?

Ohio Natural Gas℠

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Direct Energy
Simple. Friendly. Direct.

IGS
ENERGY