

What Have you Done with My Data Lately?

Today's Speakers

- **Tom Hassenboehler, Executive Director, EC- MAP**
- **Jason Iacobucci, President, PowerRunner**
- **Chris Villareal, President, Plugged In Strategies**
- **Robert King, President, Smart Global Meter**
- **Greg Poulos, Executive Director, Consumer Advocates-PJM States, Inc.**



ENERGY CONSUMER MARKET ALIGNMENT PROJECT

Data, Markets, and the Role of Government

Aligning Public Policy with a Digital Energy Future

NARUC Meeting, November, 2018
Washington, D.C.

The world's most valuable resource is no longer oil, but data

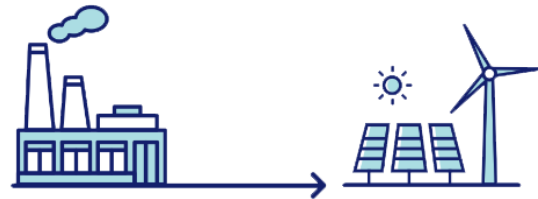


May 6, 2017

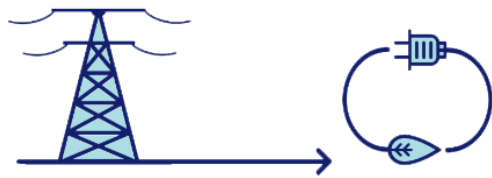
Digital Transformation of the Energy System

Energy data exists today, but is it being effectively used?

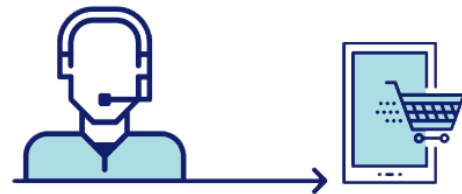
Data can empower efficiencies AND new markets in digital assets.



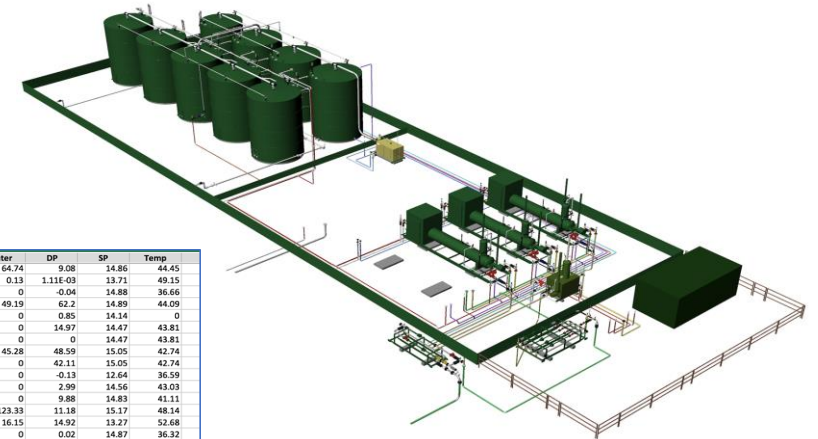
Generating



Distributing



Selling

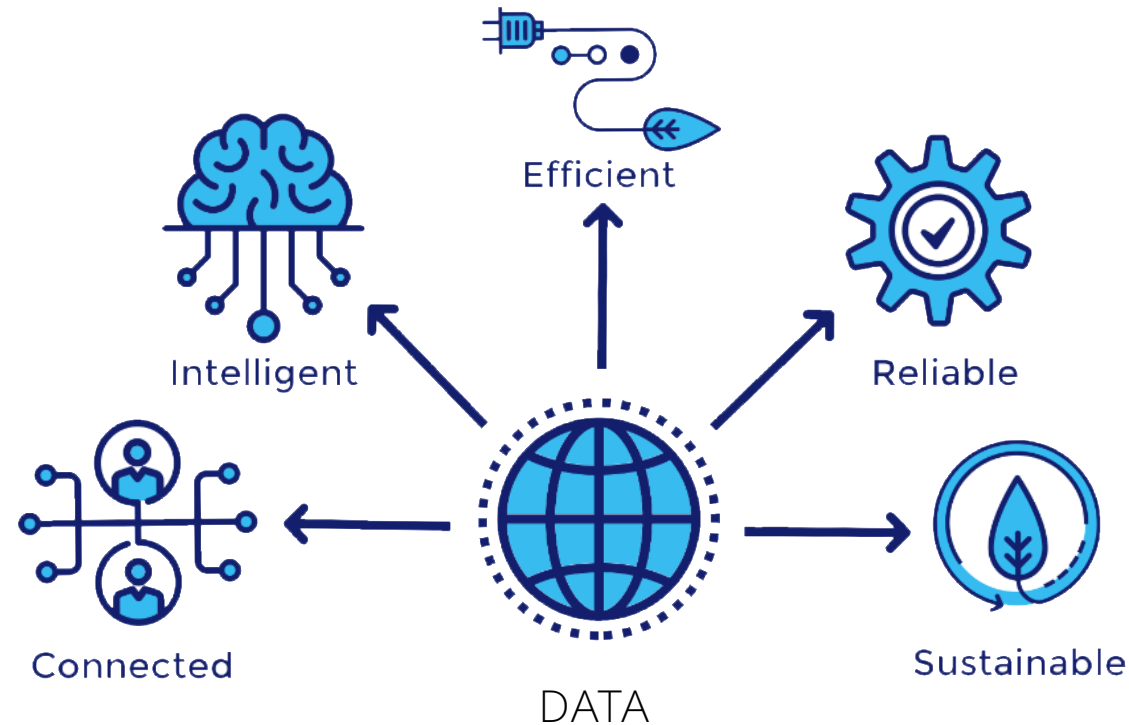


ProducerID	ImportRowID	Starttime	API	Volume	Water	DP	SP	Temp
1	49	00:00:0	49-005-3610	18.55	64.74	9.08	14.86	44.45
1	50	00:00:0	49-005-3611	7.35E-04	0.13	1.11E-03	13.71	49.15
1	51	00:00:0	49-005-3633	0.14	0	-0.04	14.88	36.66
1	52	00:00:0	49-005-3640	78.57	49.19	62.2	14.89	44.09
1	53	00:00:0	49-005-3641	8.07	0	0.85	14.14	0
1	54	00:00:0	49-005-3641	16.24	0	14.97	14.47	43.81
1	55	00:00:0	49-005-3641	0	0	0	14.47	43.81
1	56	00:00:0	49-005-3641	137.8	45.28	48.59	15.05	42.74
1	57	00:00:0	49-005-3641	93.7	0	42.11	15.05	42.74
1	58	00:00:0	49-005-3747	0	0	-0.13	12.64	36.59
1	59	00:00:0	49-005-3800	10.51	0	2.99	14.56	43.03
1	60	00:00:0	49-005-3800	19.2	0	9.88	14.83	43.11
1	61	00:00:0	49-005-3800	30.1	123.33	11.18	15.17	48.14
1	62	00:00:0	49-005-3800	0	16.15	14.92	13.27	52.68
1	63	00:00:0	49-005-3800	0.05	0	0.02	14.87	36.32
1	64	00:00:0	49-005-3809	0	0	0	12.7	0
1	65	00:00:0	49-005-3809	95.07	117.06	15.3	15.33	54.58
1	66	00:00:0	49-005-3809	0	0	0	12.7	0
1	67	00:00:0	49-005-3809	19.47	276.7	0.76	14.95	48.35
1	68	00:00:0	49-005-3810	98.27	1.99	15.43	15.4	49.92
1	69	00:00:0	49-005-3810	0	0	0	12.7	0
1	70	00:00:0	49-005-3810	0	0	0	12.7	0
1	71	00:00:0	49-005-3868	20.46	16.92	11.19	14.88	42.37
1	72	00:00:0	49-005-3868	1.34	0	0.13	14.47	42.51
1	73	00:00:0	49-005-3868	21.38	14.25	12.19	14.89	46.54
1	74	00:00:0	49-005-4086	78.96	0	31.64	17.22	42.85
1	75	00:00:0	49-005-4086	3.2	0	0.83	15.9	29.13
1	76	00:00:0	49-005-4106	9.43	0	6.16	5.63	49.59
1	77	00:00:0	49-005-4107	17.39	0	8.65	5.54	48.46
1	78	00:00:0	49-005-4107	0	0	0	15.35	50.55
1	79	00:00:0	49-005-4107	0	0	0	15.33	50.46
1	80	00:00:0	49-005-4107	13.86	0	5.46	5.63	49.59
1	81	00:00:0	49-005-4107	0	0	0	15.33	50.46
1	82	00:00:0	49-005-4107	7.23	0	3.63	5.63	49.59
1	83	00:00:0	49-005-4107	15.05	0	15.63	5.54	48.46
1	84	00:00:0	49-005-4107	13.54	0	12.74	5.54	48.46
1	85	00:00:0	49-005-4107	13.97	0	13.47	5.59	49.83
1	86	00:00:0	49-005-4107	14.18	0	5.75	5.59	49.83
1	87	00:00:0	49-005-4108	17.25	0	31.6	3.48	44.25
1	88	00:00:0	49-005-4108	0	0	0	3.44	44.33

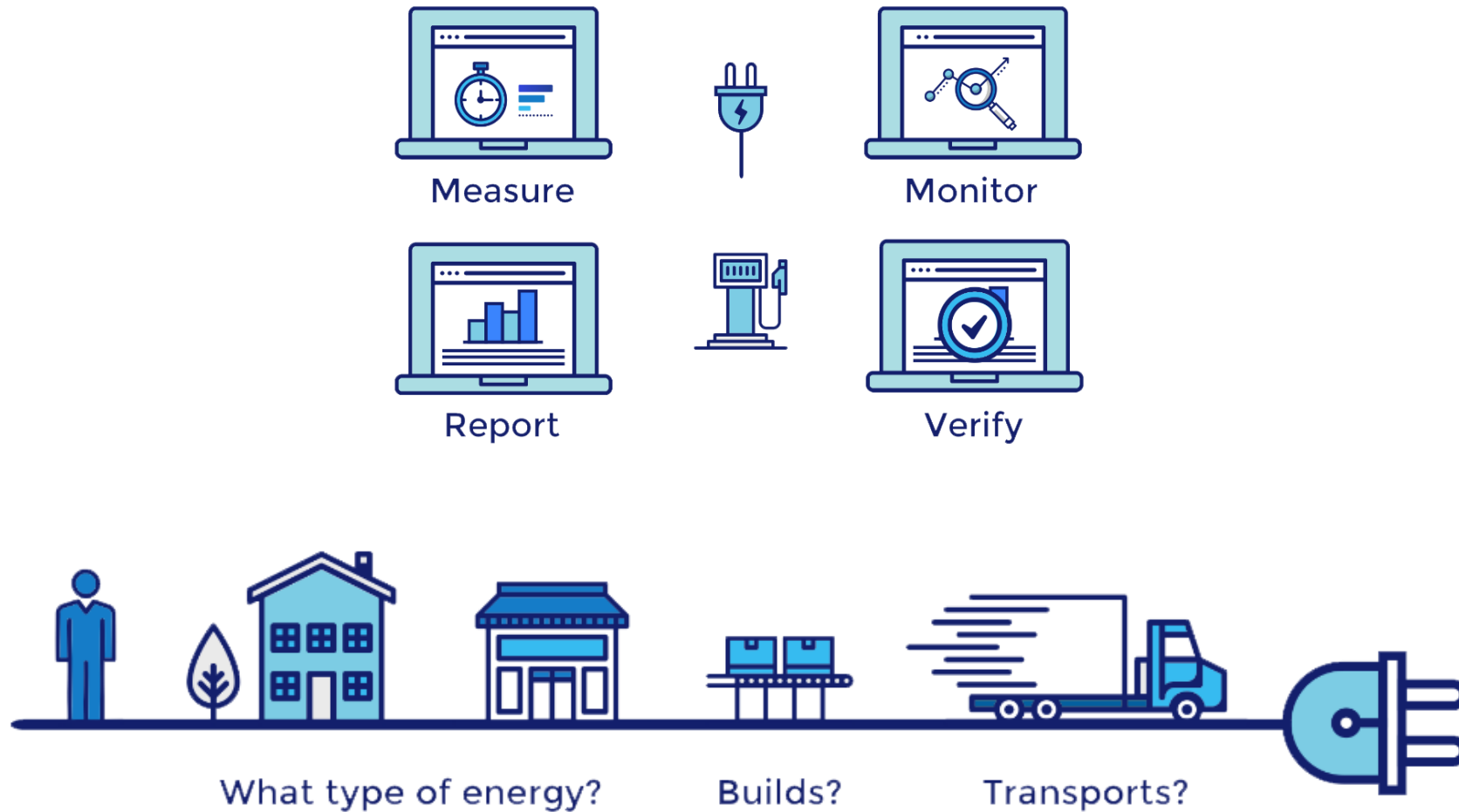
DATA

Empowering Market Innovation through Digitalization

Decentralization, Automation, and Connectivity
Are Driving Data into Seamless, Usable New Formats



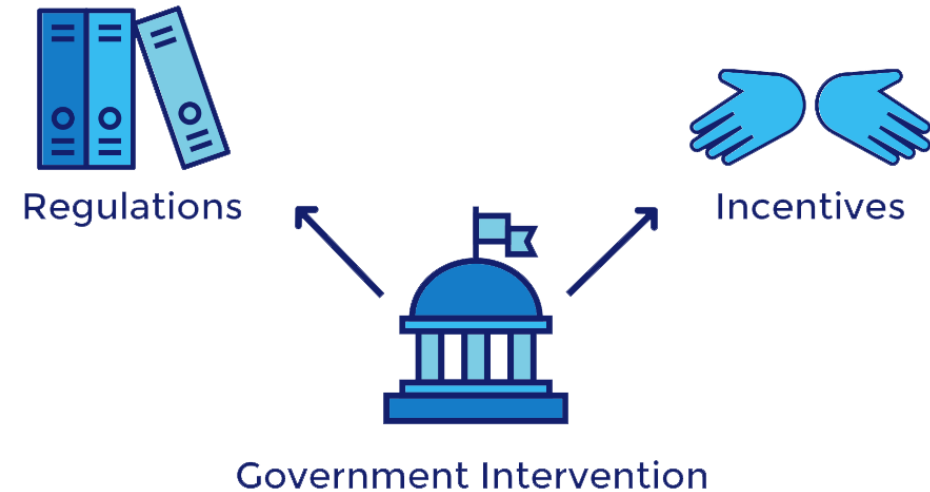
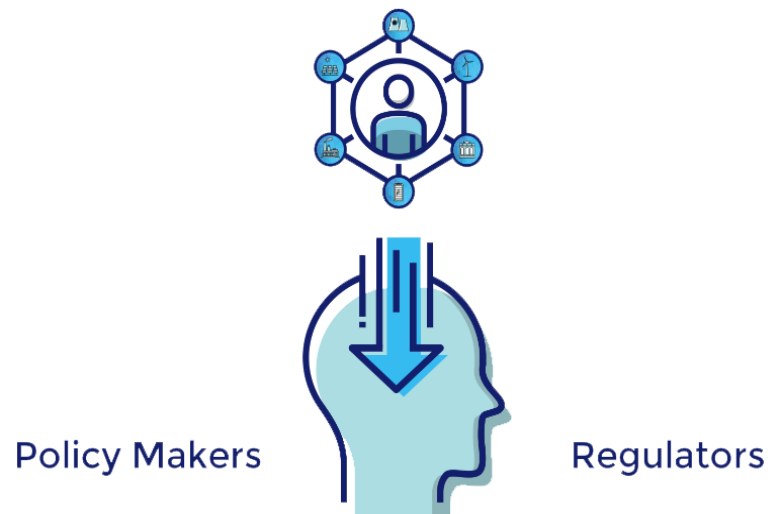
Digital MRV: Enabling Transparency, Traceability and Product Differentiation



Identifying Business, Policy, and Market Inertia Barriers

Non Regulatory: How Do We Drive Data into Commodity Markets *AND* Facilitate Data-Driven Climate Disclosure/Risk Mitigation?

Regulatory: How Can We Enable More Seamless Integration to Accelerate Permitting *AND* Increase Transparency?



EC-MAP

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www.EC-MAP.org



@ecmapfuture

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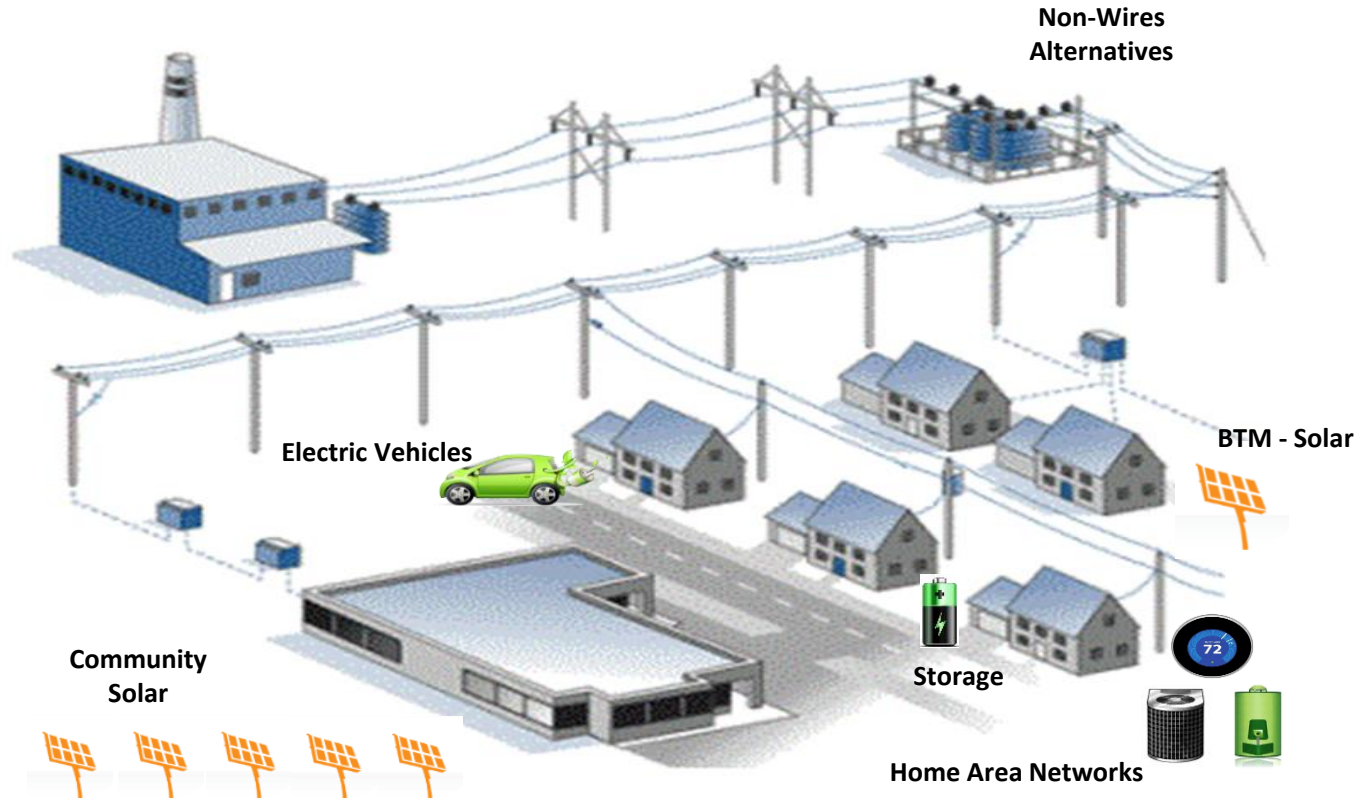
The Value of Granular Transactional Data



The Bidirectional 21st Century Grid

Data Sources

- AMI
- CIS
- SCADA
- GIS
- Weather
- Behind-the-meter (HAN)
- and growing...



Data Supports:

- Locational Resource Planning - NWA
- DER Valuation
- DER Integration
- Demand Response
- Asset Optimization
- Equitable Rates
- and more...

“What Have You Done with My Data Lately?”

Granular data supports more dynamic and detailed regulatory filings

What's the value of data?

<u>System Awareness</u> Grid Resiliency and Fidelity	<u>Resource Planning</u> Asset Utilization & Capital Optimization	<u>Rate of Return</u> New Rate & Revenue Models
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What can you do with these data that will be useful?

What Have you Done with My Data Lately?

Chris Villareal

Plugged In Strategies

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Robert King

Smart Global Meter

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Greg Poulos

Consumer Advocates–

PJM States, Inc.

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Audience Questions
(submit through the app)

Panel Discussion

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*Please complete the session survey
in the meeting app*

A3 – What Have You Done...

Look under the “polls” button