



Tolerable Planet
Enterprises

SSI-3: *Repurposing the Current Built Environment for the Future*

Cameron Brooks

April 5, 2019

E9 Insight



Why 9? Newsletter: <http://e9radar.link/why9>

1. Commission Activity

monthly newsletter and online proceeding database

2. Tailored Research

curated updates and market segmentation

3. Engagement Support Tools

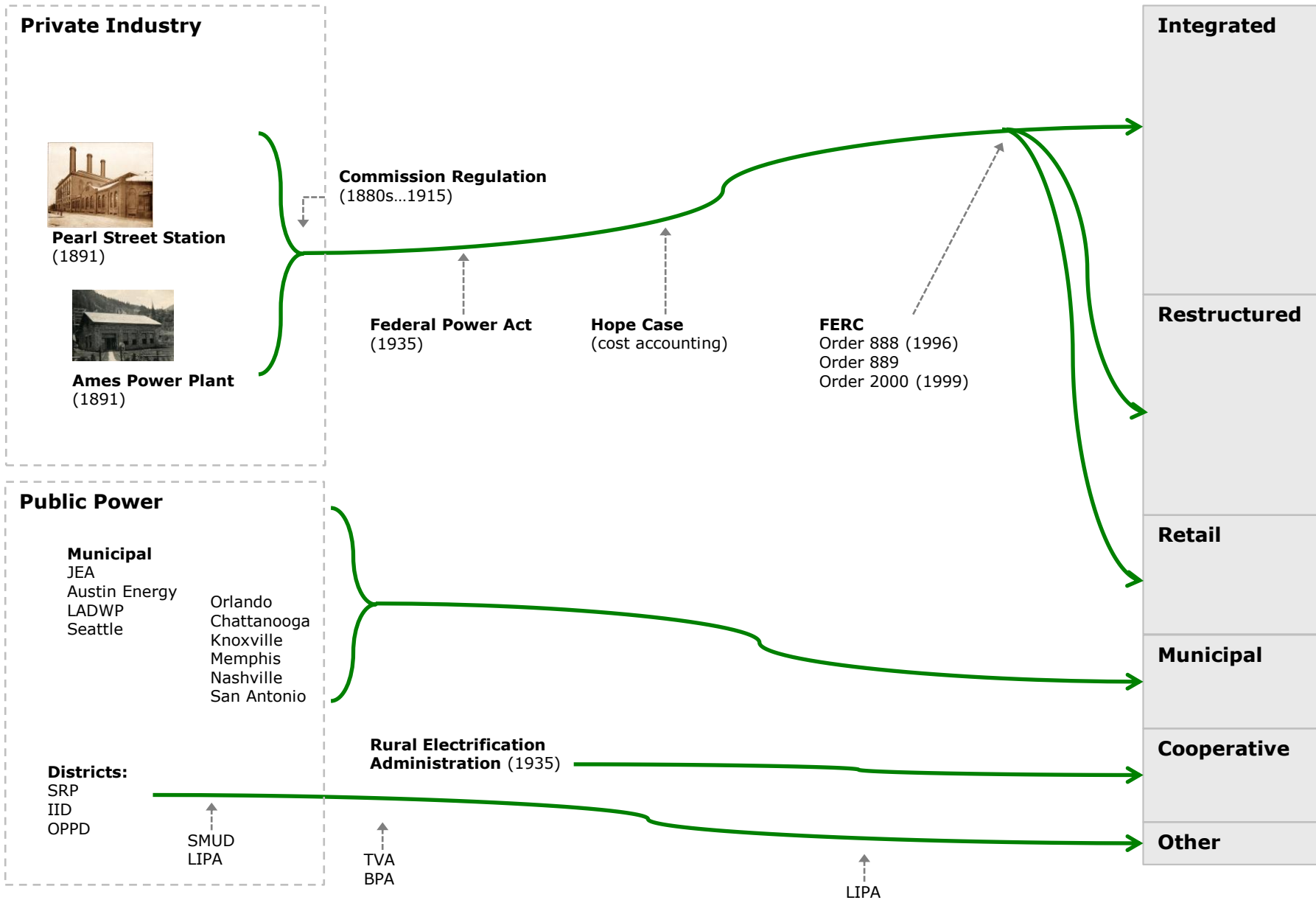
meeting monitoring and stakeholder comments





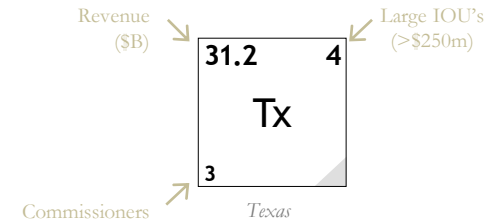


Historical Overview...utilities and regulations deeply enmeshed





Periodic Table of State Policy



23 4 Fl 5										21.7 6 Ny 5	7.6 3 Ma 3
12.3 1 Ga 5	11.7 3 Nc 7	7 4 Mo 5					35 3 Ca 5	13.9 6 Oh 5	14.3 6 Pa 5	4.6 2 Ct 3	
8.9 - Tn 4	9.8 2 Va 3	4.5 2 Ok 3	6 2 Mn 5	7.4 2 Az 5	3.1 2 Nv 3	6.4 3 Wa 3	12.1 3 Il 5	10.3 3 Nj 5	1.5 1 Nh 3		
7.9 1 Al 3	7.1 3 Sc 7	3.8 3 Ks 3	3.5 2 Ia 3	5 1 Co 3	1.6 2 Id 3	3.8 2 Or 3	11.5 2 Mi 3	7 4 Md 5	1.4 1 Me 3		
5.8 5 La 5	6.5 4 Ky 3	2.6 - Ne 5	1.2 - Nd 3	2.3 1 Ut 3	1.2 1 Wy 3	3.3 3 Hi 3	8.7 5 In 5	1.3 1 Dc 3	1 1 Ri 3		
4.2 2 Ms 3	2.5 3 Wv 3	3.6 2 Ar 3	1 - Sd 3	2 2 Nm 5	1.1 1 Mt 5	1 - Ak 5	7.1 5 Wi 3	1.3 1 De 5	.8 1 Vt 3		

Deep South

Upper South

Lower Plains

Upper Plains

Intermountain West

Pacific Rim

Midwest

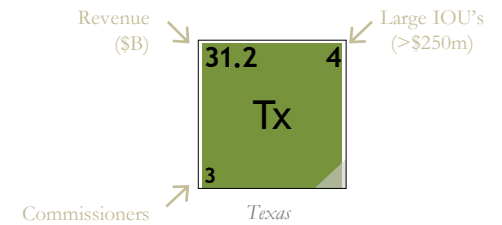
Mid-Atlantic

New England

Electricity Journal: <http://e9radar.link/table> (July 2015)

Periodic Table of State Policy

FAMILIES



23 Fl 5										21.7 Ny 5	7.6 Ma 3
12.3 Ga 5	11.7 Nc 7	7 Mo 5					35 Ca 5	13.9 Oh 5	14.3 Pa 5	4.6 Ct 3	
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Deep South

Upper South

Lower Plains

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Intermountain West

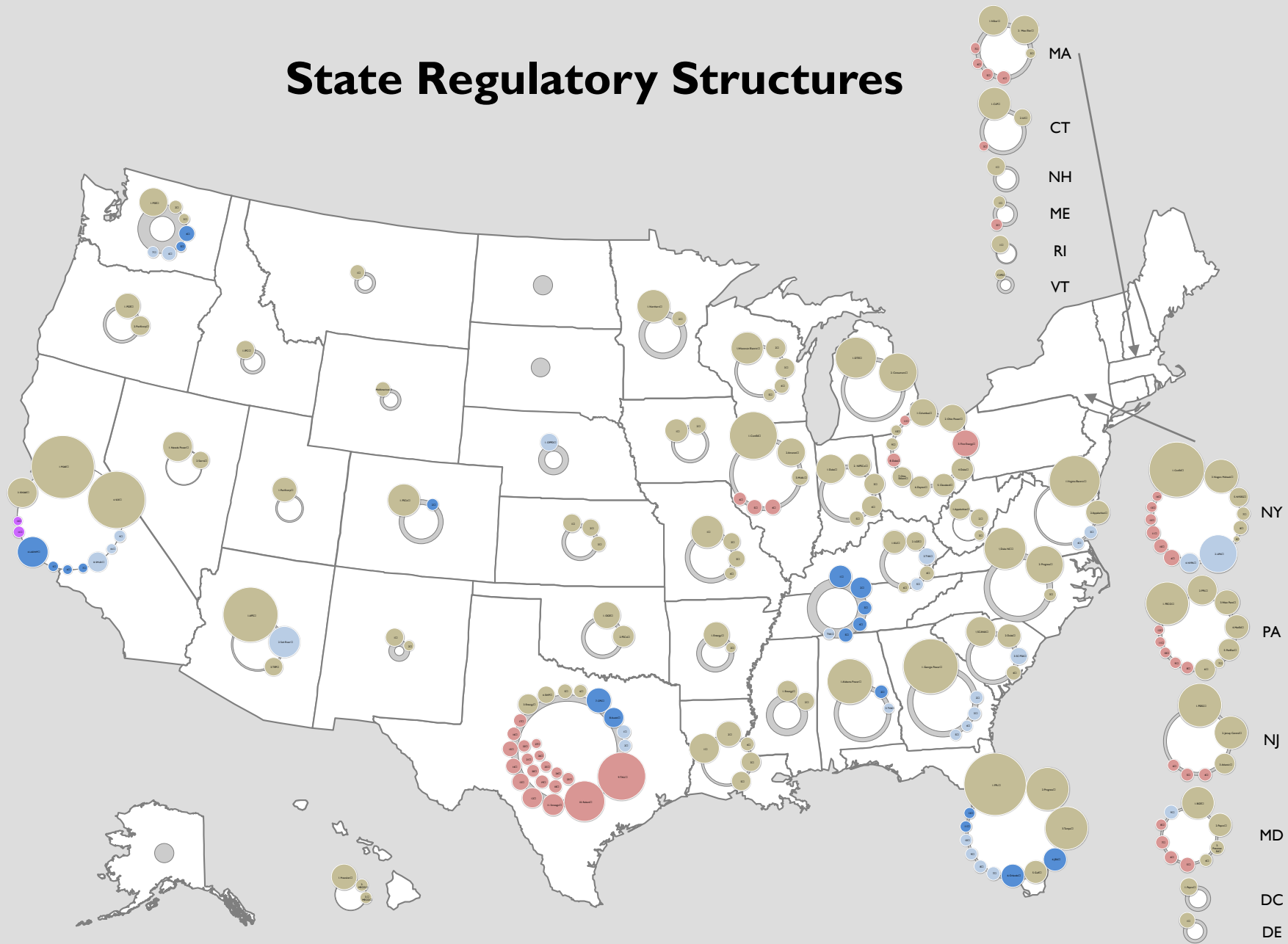
Pacific Rim

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New England

State Regulatory Structures





Smyth v. Ames (1898)

United States v. Terminal Railroad Assoc. (1912)

Federal Power Comm. v. Hope Natural Gas (1944)

—
...

“We must fit our legal principle to the economy of the industry and not try to fit the industry to our books.”





Two kinds of “efficiency”

$$e_1 = \frac{Heat_{captured}}{Heat_{content}}$$

1st Law:

Conservation of Energy

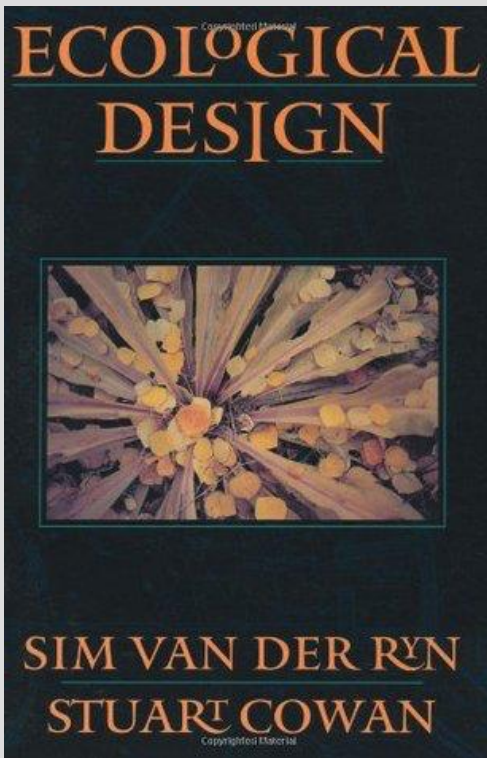
$$e_2 = \frac{Energy_{task}}{Energy_{actual}}$$

2nd Law:

Entropy Increases

The path to the “utility of the future”?





Five Principles:

1. Solutions grow from place
2. Ecological accounting informs design
3. Design with nature
4. Everyone is a designer
5. Make nature visible

“The process of modernization stimulated by the Industrial Revolution found its most sublime expression in electrical power.”

*“The process of modernization stimulated by the **Information** Revolution found its most sublime expression in”*

Thank You



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