
“Chancen und Perspektiven für die Zukunft – Was macht eine Regionen erfolgreich?”

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Essen, Germany

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Northern Virginia Regional Commission

International Partnerships Viewed Suspiciously



International Work Marginalized and Domestic Benefits Ignored



“While the weakest parts of the Dutch system protect inland areas from one-every-1,250-years flooding, Louisiana’s strongest systems are only rated to a 100-year storm.”

What Needs to Occur:

Learning or Exchange That Is:

Problem-Focused,

Goal-Oriented

Geographically-Targeted

Where Policymakers Receive:

- **Context of Imported Programs and How they Evolved;**
- **Quantitative Performance Measures;**
- **Prospective Analysis About Transfer Possibilities**

And There are OUTCOMES – Not Just Events or Exchanges

Case of Northern Virginia

- **500,000 new residents moving to Northern Virginia by 2020**
- **Few actionable and comprehensive energy plans**



The Causes/Sources of GHG Emissions



Comparative Quantitative Benchmarks

Total CO2e Per Capita Per Year (metric tons)

Canada	22
USA	22
Denmark	14
Germany	10
European Union	10
Virginia	23

Municipal CO2e per capita per year (metric tons)

USA – Washington DC	20
Germany - Mannheim	5
Denmark - Copenhagen	3

„Governments to Cooperate and Companies to Compete“ - Michael Eckert

“Business between Europe and the U.S. exceeds \$ 3.75 trillion annually and accounts for over 14 million ‘on-shored’ jobs every year”

“Total European investment in India is less than half of German investment in individual U.S. states such as Missouri or South Carolina”

- Hamilton and Quinlan (2009)

Trade and Investment Between Virginia and Europe



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Employment

European* investment in Virginia supported 74,000 jobs in 2008.

Sources of Employment within Virginia, 2008	
Country	Employment
United Kingdom	28,300
Japan	17,100
Germany	14,000
France	13,200
Netherlands	11,900



***Numbers just for France, Germany, Netherlands, Switzerland and the UK.**

**** Data for jobs related to trade, plus indirect employment effects in terms of suppliers,**

distributors, makes 200,000 jobs with Europe

Source: Bureau of Economic Analysis, Foreign Trade Division, U.S. Census Bureau

CEP in Loudoun & Arlington Counties

NVRC



Garforth International

The Response:

Community Energy Planning (Problem-Focused Goal-Oriented Learning)

Typology:

Energy Efficiency

Efficient homes and buildings/transportation

Heat Recovery

Distributed combined heat and power

Renewable Energies

PV, solar thermal, wind

Energy Distribution & Scale

Flexible distribution with multiple fuels

Energy Efficiency Lessons From Germany

ENERGIEAUSWEIS für Nichtwohngebäude
gemäß den §§ 15 ff. Energieeinsparverordnung (EnEV)

Existenz

Aushang

Gebäude

Hauptnutzung / Gebäudekategorie	
Adresse	
Gebäudetitel	
Besitzer Gebäude	
Besitzer Wärmezeuger	
Besitzer Klimaanlage	
Nutzungsfläche	

Gebäudefoto (optional)

Primärenergiebedarf

„Gesamtenergieeffizienz“

Dieses Gebäude:

kWh/(m²·a)

0

100

200

300

400

500

600

700

800

900

1000

>1000

EnEV-Anforderungswert
Neubau

EnEV-Anforderungswert
modernisierter Altbau

Aufteilung Energiebedarf

100

80

60

40

20

0

Heizenergie

Endenergie

Primärenergie „Gesamtenergieeffizienz“

Kälte- und Wärmepumpe, Wärmespeicher

Luftung

Eingebaute Beleuchtung

Wärmeverlust

Heizung

Aussteller

Unterschrift des Ausstellers



Heat Recovery & “Scale”

Legal Review of DE Under Existing Virginia Law



Cogeneration and Renewable Energies



Potential Applications in Loudoun, Fairfax and Arlington Counties



Thanks!

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