

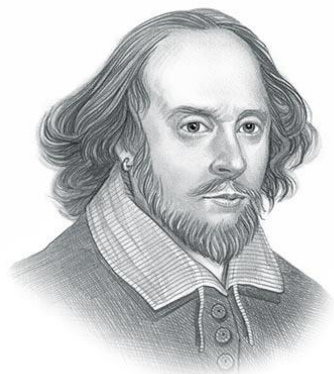
INDUSTRY TO ENERGY MARKET:

Support Behind & Challenges Ahead

Nikolay Minkov
Industrial Cluster Srednogorie



POWER MARKET DESIGN: POETIC DRAMA



LORD BARDOLPH

...

"When we mean to build,
We first survey the plot, then draw the model;
And when we see the figure of the house,
Then must we rate the cost of the erection,
Which if we find out weighs ability,
What do we then but draw anew the model
In fewer offices, or at last desist.
To build at all? Much more should we survey
The plot of situation and the model,
Consent upon a sure foundation,
Question surveyors, know our own estate,
How able such a work to undergo,
To weigh against his opposite: or else



Energy & Industry:
The Lovers, Rene Magritte, 1928

We fortify in paper and in figures
Using the names of men instead of men,
Like one that draws the model of a house
Beyond his power to build it: who, half-through,
Gives o'er, and leaves his part-created cost
A naked subject to the weeping clouds,
And waste for churlish winter's tyranny".

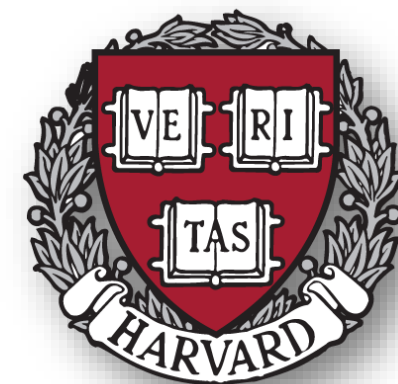
...

William Shakespeare, Henry IV, Part 2, Act I, Scene III



CLUSTER PROFILE

- ✓ **Resources Available**
 - *Mining and Smelting of Non-Ferro and Rare Metals*
- ✓ **Environmental Extensive**
 - *Environmental Old Problems and Remediation Projects*
- ✓ **Energy Intensive**
 - *Large Scale Industrial Energy Consumers (4.5% of Bulgarian Power Demand)*
- ✓ **Rural Habitat**
 - *Small-size Cities and Rural Area Development*
- ✓ **Export Oriented**
 - *Vertically Integrated and Export Oriented Companies*
- ✓ **Economic Factor**
 - *Key Contributor to Bulgarian GDP (6%) and Bulgarian Export (15%)*



CLUSTER ORIGATION

THREE ACADEMIC TO BUSINESS PILLARS

What are the main pillars of our cluster origination?

Pillar 1: Cheaper Energy to Industry

Improving industrial competitiveness through power vertical unbundling and **market liberalization**

Pillar 2: Higher Competitiveness to Markets

Improvement industrial competitiveness through **developing clusters and innovations**

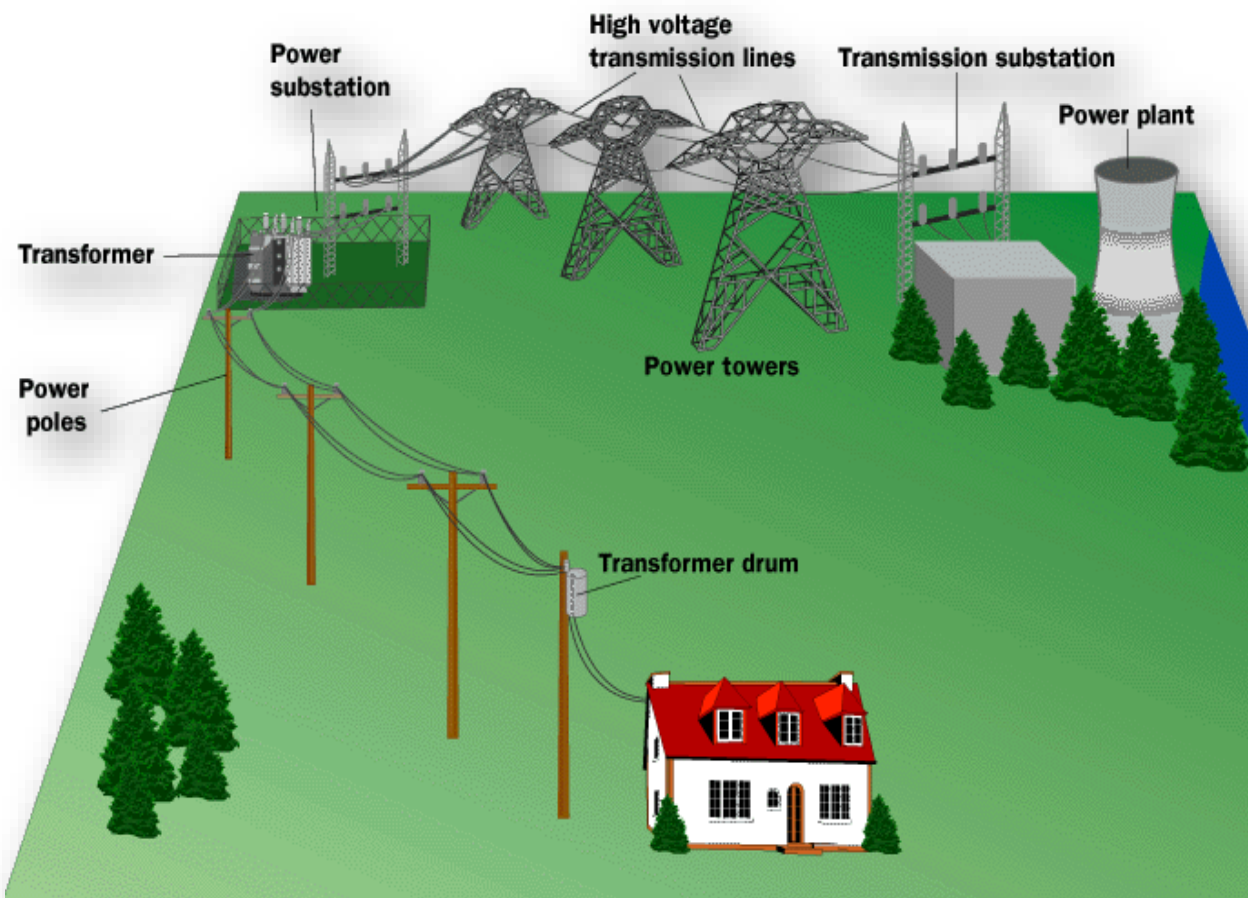
Pillar 3: Better Quality of Life to Communities

Employing best practices for **public-private partnership** through **creating shared value**



HEAVY INDUSTRIES *to* POWER VERTICAL

ENERGYANDMINES



CLUSTER to MARKET LIBERALIZATION



CLUSTER VALUE *on* INDUSTRIAL COMPETITIVENESS

2005: Invited
Distinguished
Guest Speaker:

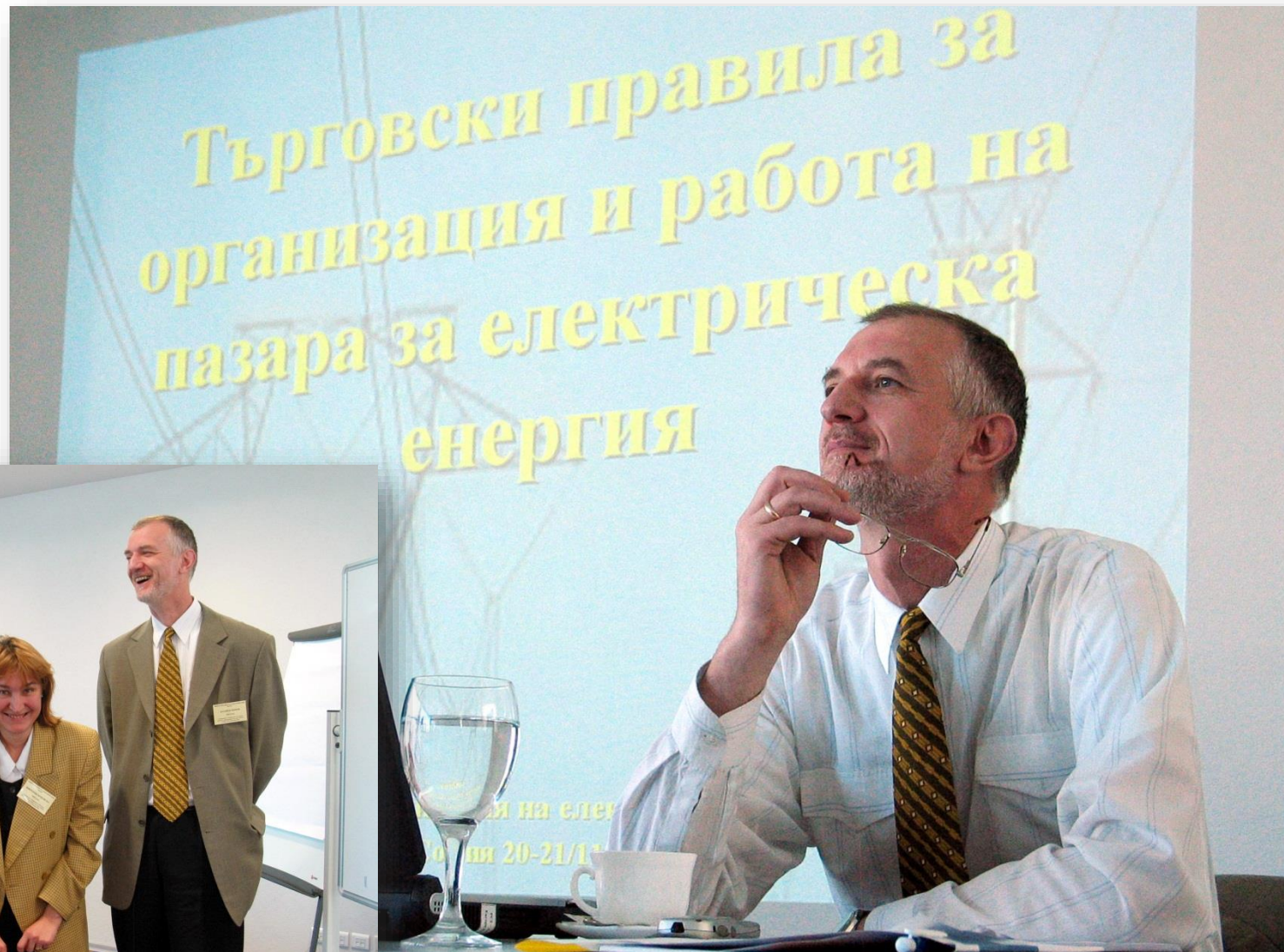
Mr. Al Mansur,
Chief Energy Officer,
Dow Chemicals, USA

President,
International
Federation of
Industrial
Energy
Consumers
IFIEC

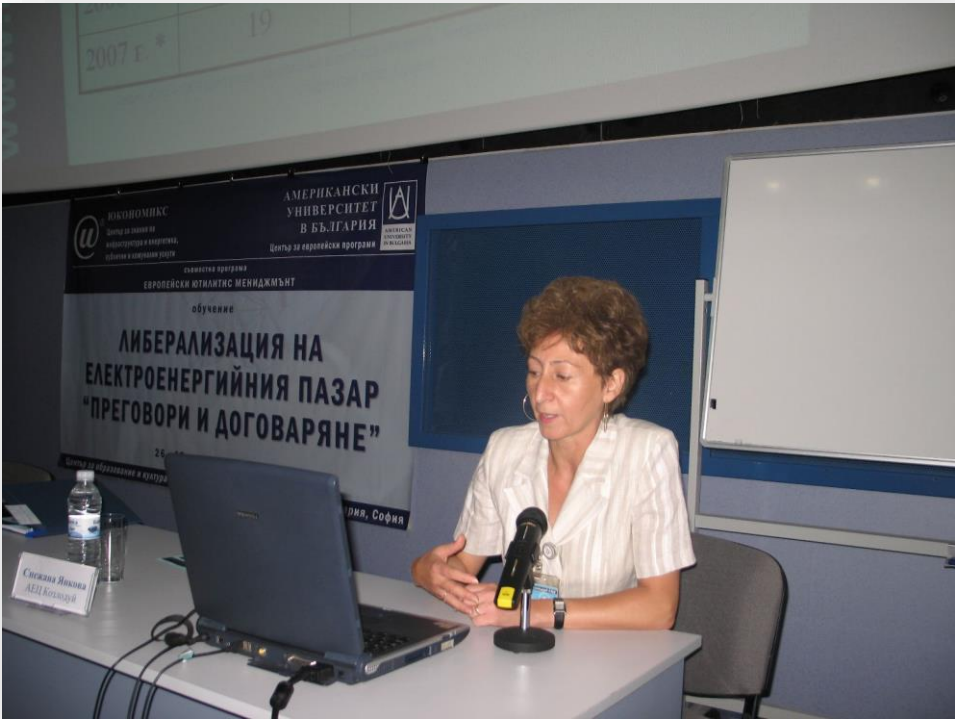
Industrial Cluster
SREDNOGORIE
Support to
establishment of
BFIEC



NEK POWER MARKET ARCHITECTS



MARKET ENERGY MANAGERS



POWER MARKET LIBERALIZATION POLICY



ENERGY MARKET SUMMER SCHOOLS



CLUSTER to ENERGY EDUCATION



2006: Cluster & Industrialists Energy Education Forum



2018: Cluster & Universities Energy Education Forum

CLUSTER VALUE to ENERGY LEADERS



POWER MARKET ALUMNI



CLUSTER VALUE to ENERGY YOUTH





SMART ENERGY & UTILITIES



CUSTOMERS PROTECTION RIGHTS



CLUSTER VALUE to ENERGY REGION



ERRA
ENERGY REGULATORS
REGIONAL ASSOCIATION

Regulatory Participation & Communication Workshop
October 26-27, 2005, Hotel Rus, Kiev, Ukraine




National
Association of
Regulatory
Utility
Commissioners



Sunshining Electricity Market Liberalization
An Equilibrium Navigation over the Stakeholders' Dream / Reality Ratio

Nikolay Minkov
Chairman, Energy & Utilities Committee, Bulgarian International Business Association
Member, Electricity Market Liberalization Working Group, SEWRC
Sofia, BULGARIA



The World Bank

Southeast European Electricity Market Monitoring Workshop
October 3-5, 2005
Athens Acropolis Hotel
Athens, Greece

**Balancing Stakeholders' Interests in Electricity Market Liberalization:
A Viewpoint of Bulgarian Eligible Customers**

Nikolay MINKOV
member of the Electricity Market Liberalization Working Group to the SEWRC
Sofia, BULGARIA

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5th ERRA Energy Regulation and Investment Conference
May 15 – 16, 2006
Budapest, Hungary

Stakeholders' Balance Navigation in Regional Energy Market Liberalization and Integration

Nikolay Minkov
Chairman, Energy & Utilities Committee
Bulgarian International Business Association



USAID
FROM THE AMERICAN PEOPLE



USEA
United States Energy Association

Workshop on Selecting a Competitive Electricity Supplier

On a Way to SEE FIEC ...
**Balancing Stakeholders' Interests in Electricity Market Liberalization
Bulgarian Experience**



Source: Energy Community

Nikolay Minkov
Chairman
Bulgarian Federation of Industrial Energy Consumers (BFIEC)

November 4th, 2008
Aleksandar Palace Hotel, Skopje



WORLD FORUM
ON ENERGY
REGULATION IV

Industrial Stakeholders in Regional Energy Market
How heavyweights to face-out heavy happiness?

Nikolay Minkov
Chairman, Infrastructure, Energy & Utilities Committee
Confederation of Employers & Industrialists in Bulgaria

World Forum on Energy Regulation IV
Athens, Greece
October 18 - 21, 2009

INDUSTRY TO ENERGY MARKET:

Support Behind & Challenges Ahead

Thank You for Your Attention!

Nikolay Minkov
Industrial Cluster Srednogorie

