Advancing the Promise of Turkey in the Global Economy: The Strategic Imperatives

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Three Essential Points:

- 1. The Current World Disorder: The Potential Role Turkey Could Play?
- 2. Securing Superior Economic Stature: Toward Enhanced Global Influence?
- 3. Stimulating Innovation & Globalization through targeted Growth Platforms?

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The World Disorder

Changed Equations of Power:

- 1. One Super power with no clear value proposition/*Eroding Trust & No Counter balance*
- 2. Shift in Economic Center of Gravity: AP versus Atlantic
- 3. New Economic Power of OPEC/Uncertainties in the Energy Sector
- 4. Middle East's search for a New Identity?
- 5. Expanding EU = New Possibilities?/New Groupings?

Geo-Political Alliances are In Transition

Paradigm Shift

Past

NATO

U.S.

USSR

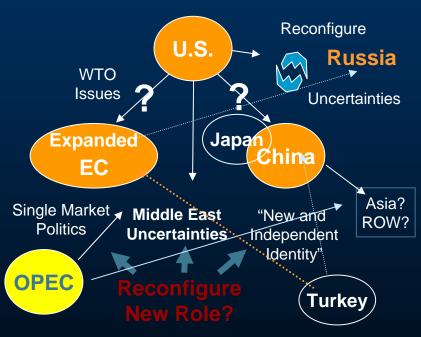
VASIA

OPEC

ROW

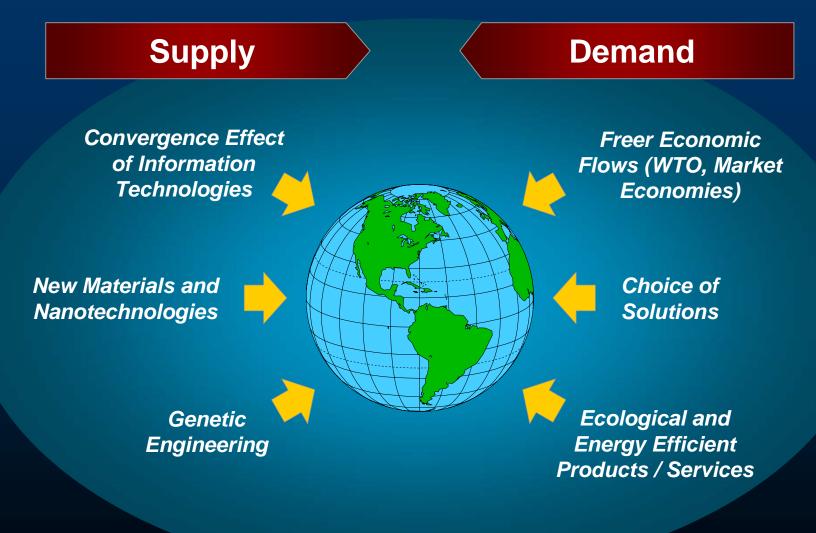
Bond by Cold War Forces of Alliances

Future

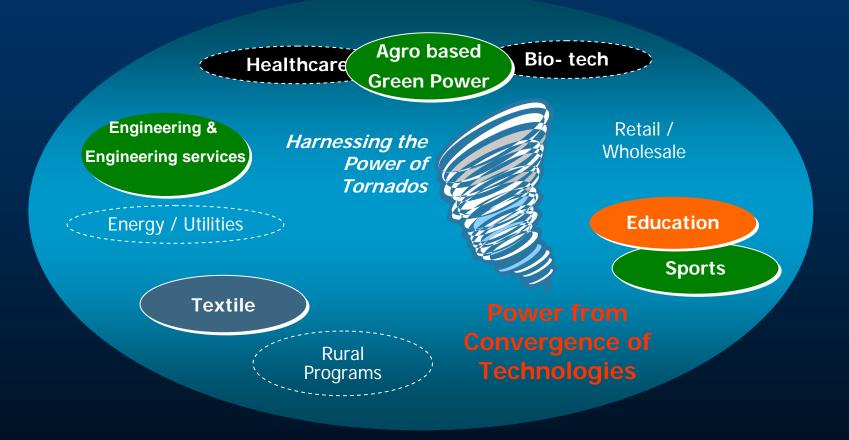


Deconstruction of Past Geopolitical Architecture

The Emerging Economic Environment will be influenced by several fundamental forces

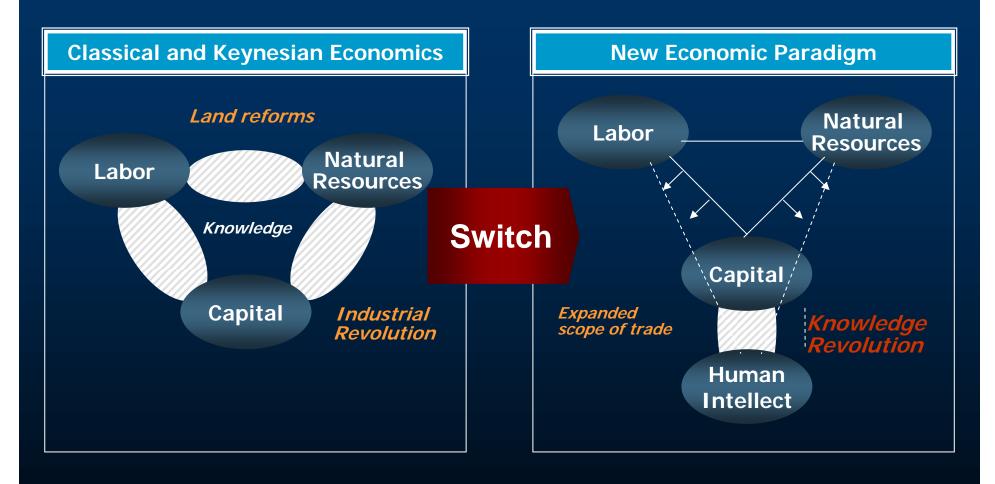


In the process several industries critical to the Nation could under-go major changes



Turkey need to understand how the Tornado will change character of different industries

As a result Turkey has to make a switch from Classical to *Knowledge Economics*



At the same time Center of Gravity of Global Economy is also shifting

Percent of GDP Distribution



Role of Turkey?

In the last quarter century Turkey has addressed some of the fundamentals

Mid Eighties 2006 2010

Economic modernization

- 1. Stabilizing democracy
- 2. Harnessing Inflation
- 3. Strengthening Turkey's overall economic infrastructure
- 4. Partial Modernization of the Corporate Sector

Turkey's foreign exchange reserves increased three folds in the last ten years

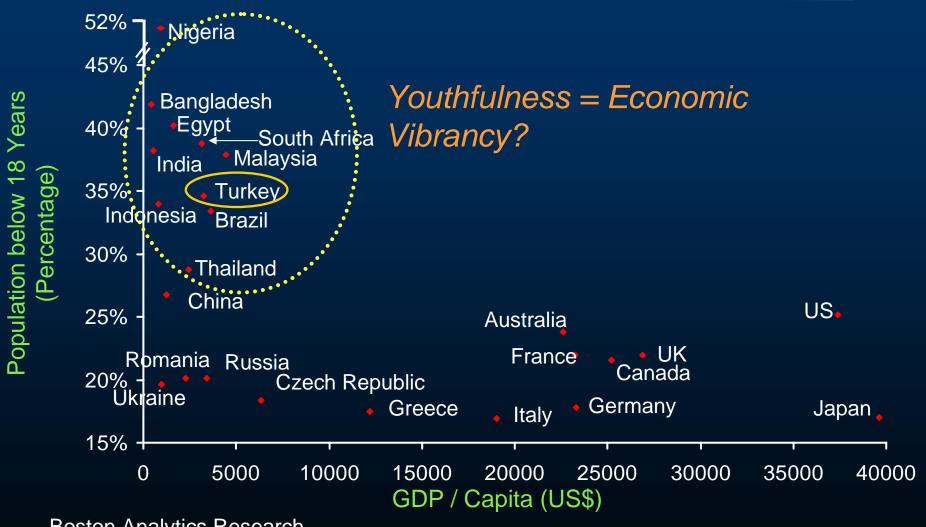


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1. International Monetary Fund (http://www.imfstatistics.org)

More than thirty five percent of total population in Turkey is below 18 years

Percentage of Population below 18 Years vs. GDP per Capita (2005)¹



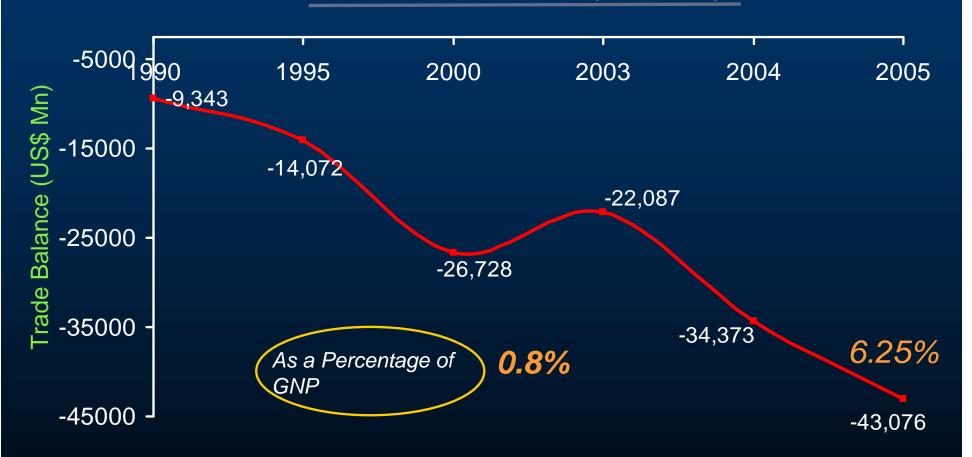
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^{1.} Energy Information Administration - EIA (http://www.eia.doe.gov/)

^{2.} UN Nations Population Division (http://www.un.org/endfish/)

However Turkey's trade balance has been declining

Trade Balance in US\$ Mn (1990-2005)1



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1. http://www.byegm.gov.tr/REFERENCES/TURKEYS-FOREIGN-TRADE.htm

Changing Global Environment and Turkey's Economic Possibilities imply *New Course ahead*

Mid Eighties 2006 2010

Economic modernization

Securing a Prominent Global Role

- 1. Improving the nation's long-term competitiveness (e.g. Energy Strategy)
- 2. Strengthening Turkey's Geo-Political role
- 3. Cultivating more confidence in the Corporate Sector

Accordingly, the new strategic game plan must ensure a new set of requirements are met

Internal Aspirations

- Triggering a new era
- Increasing Global exposure
- Balancing socio-economic development process

Global Environment

- Power of new economics
- Short-lived technologies
- Rising environmental concerns
- WTO environment

Significant values for excellence



High price of nonperformance

Strategic Requirements

- 1. Create distinctive competitive advantages
- 2. Select areas with winning possibilities
- 3. Evaluate possibilities with global perspective
- 4. Strategic guidance to drive leadership mechanisms
- **5.** Emphasis on soft factors

Three Essential Points:

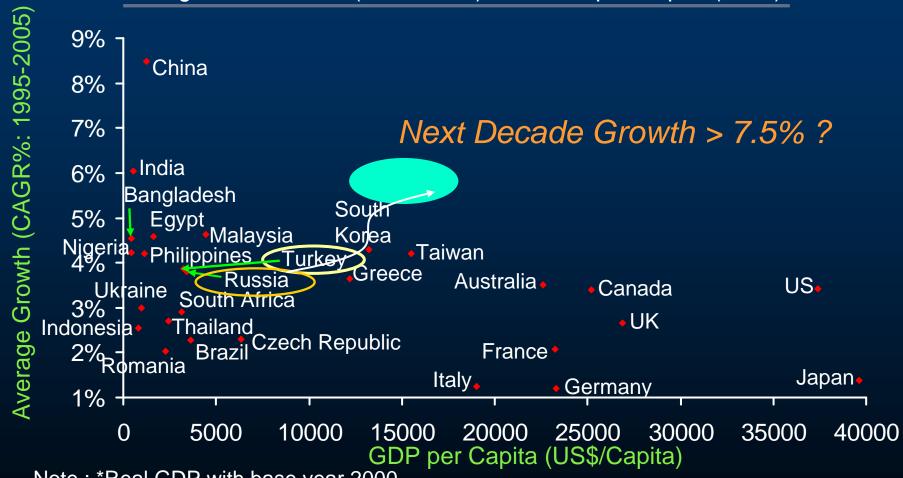
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Turkey's Position

- Strategic Location = Gateway role between East & West, North & South, between different streams of Enquiry
- Cultural Integrator
- Developing a socio-economic infrastructure (to play the Value added Clearing house role?)

Turkish economy must now aspire for a decade of growth similar to what Asian Nations have enjoyed

Average Growth Rate (1995-2005) vs. GDP* per Capita (2005)^{1,2}



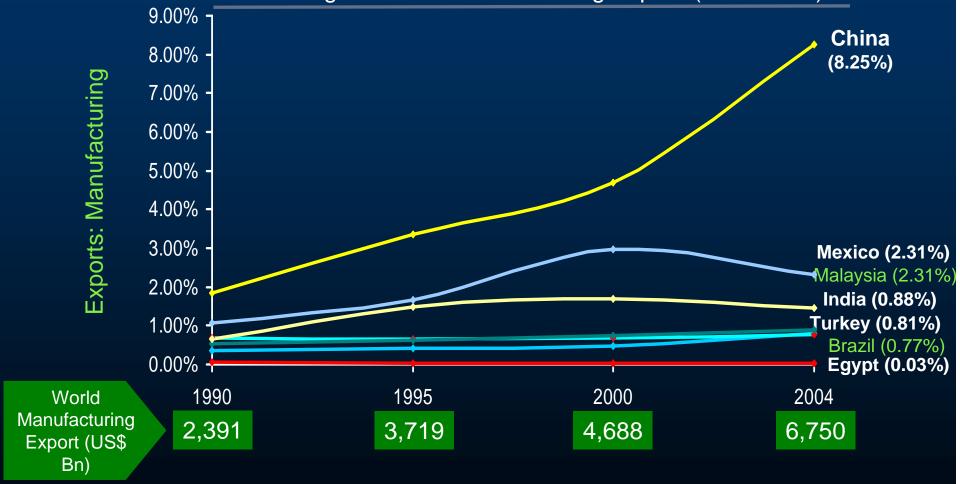
Note: *Real GDP with base year 2000

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- 1. Energy Information Administration EIA (http://www.eia.doe.gov/)
- 2. UN Nations Population Division (http://www.un.org/english/)

China's manufacturing exports as a percentage of World manufacturing exports has increased by 4.5 times

Manufacturing Exports of Select Developing Countries as a Percentage of World Manufacturing Exports(1990-2004)¹

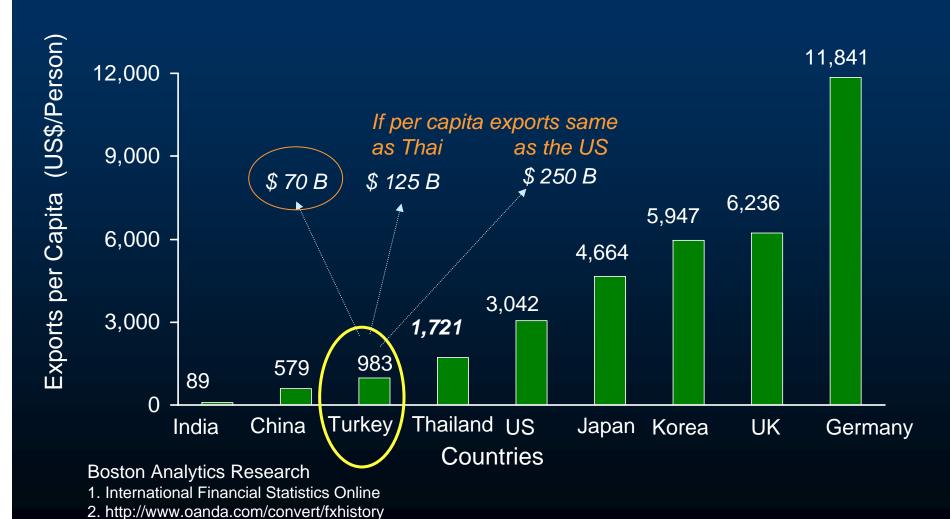


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^{1.} http://stat.wto.org/Home/WSDBHome.aspx

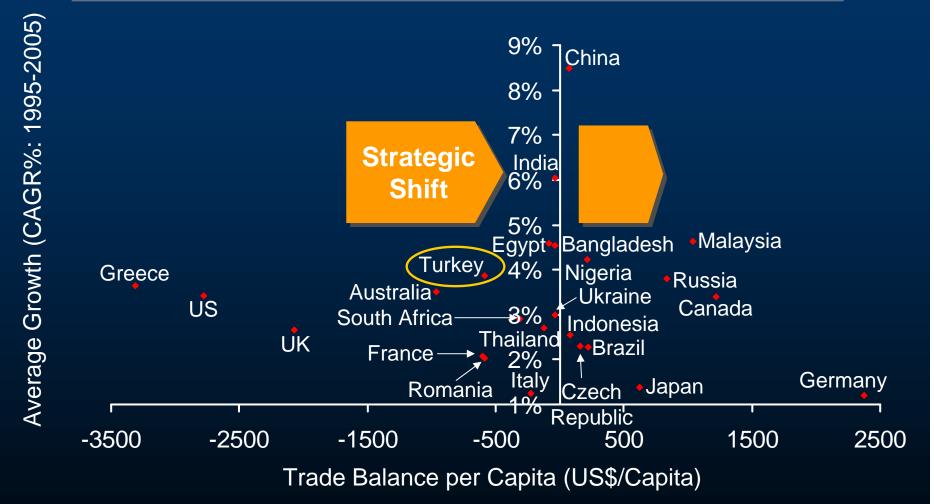
Turkey exports per capita could significantly increase

Exports per Capita of different Countries in US\$ per Capita (2005)^{1,2}



Turkey's trade deficit per capita could be a drag for its Economic Development

Average Growth Rate (1995-2005) vs. Trade Balance per Capita (2005)^{1,2,3}

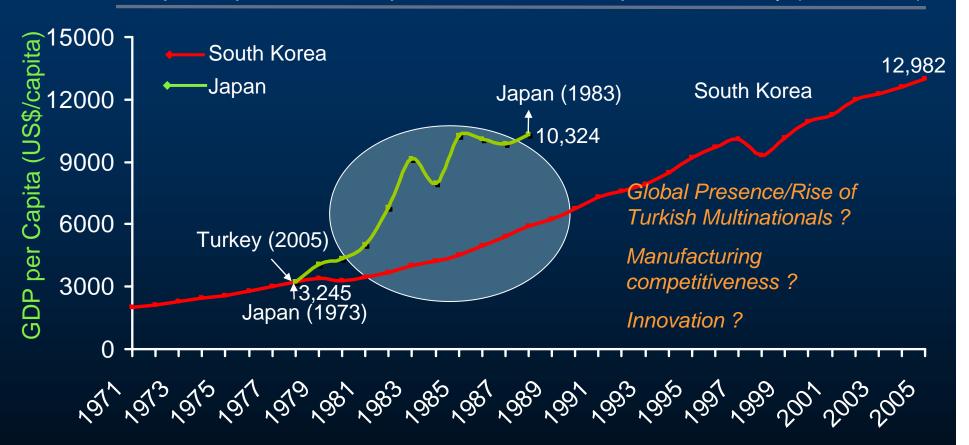


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- 1. Energy Information Administration EIA (http://www.eia.doe.gov/)
- 2. UN Nations Population Division (http://www.un.org/english/)
- 3. World trade Organization (http://stat.wto.org/)

Moving forward Turkey must evolve Global Strategy similar to South Korea in late 70s & Japan in early 70s

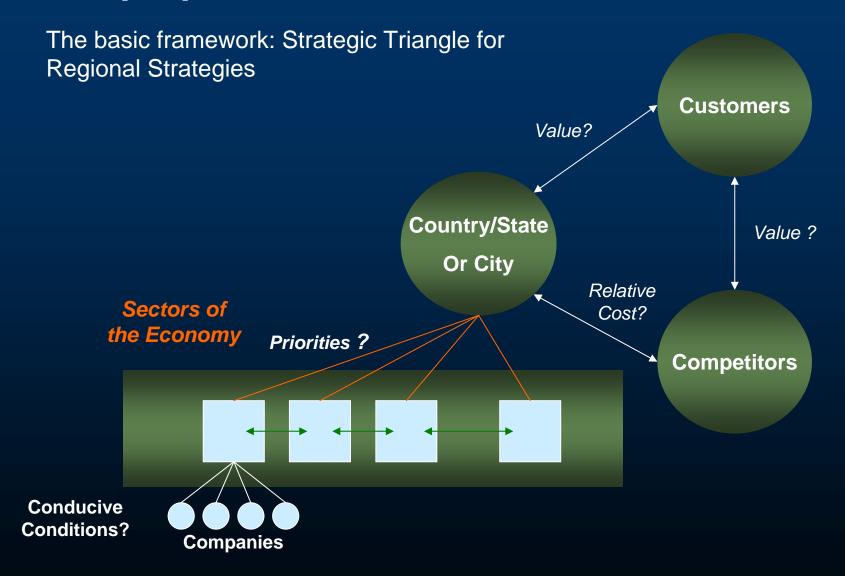
GDP per Capita in US\$/Capita: South Korea , Japan and Turkey (1971-2005)



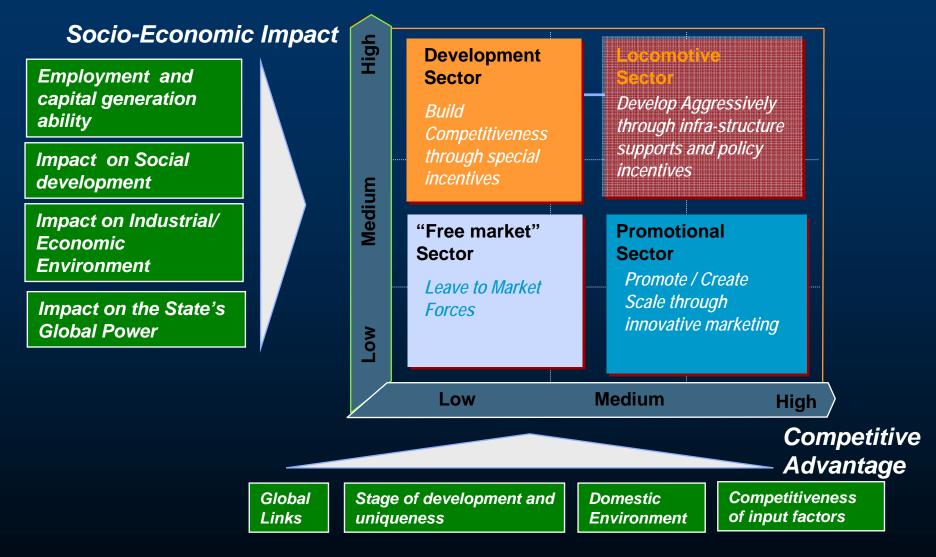
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- 1. International Monetary Fund (http://www.imfstatistics.org)
- 2. http://www.oanda.com/convert/fxhistory
- 3. World bank data ???

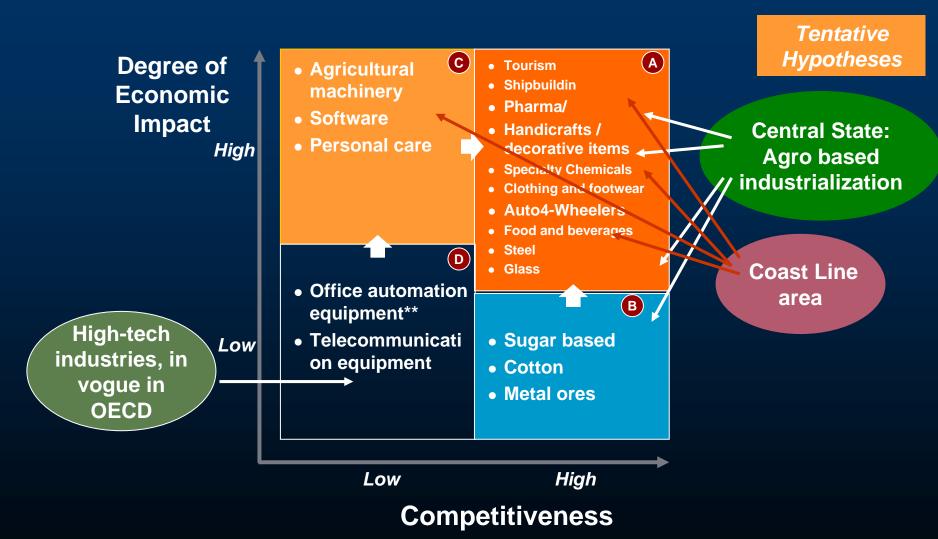
Strategic Framework for defining the economic value propositions



A Strategic framework that group industries into different roles requiring different policy and infrastructure supports



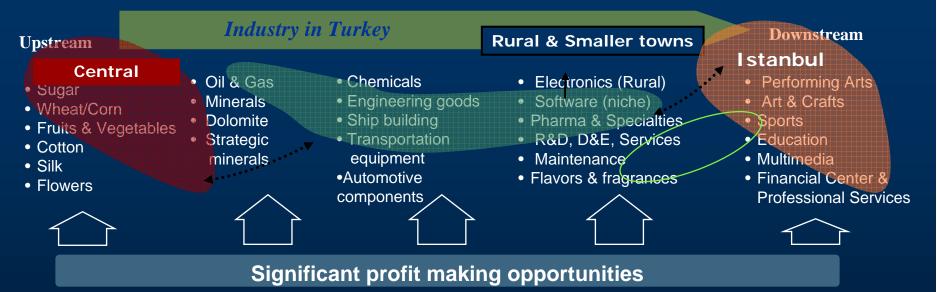
Several Industries in Turkey could emerge as the locomotive of economic growth



^{*} As finished product

^{**} Until volume picks up

Priority industries must drive infrastructure/utilities strategy and promoted through market mechanisms

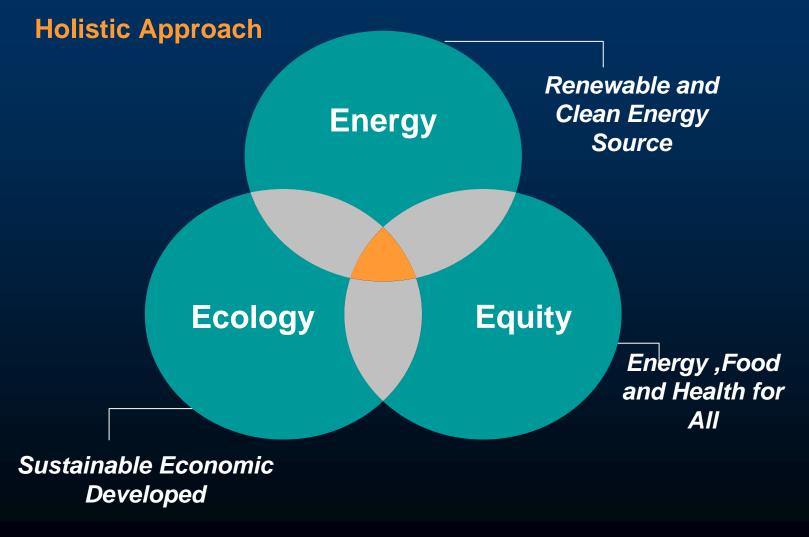


World scale projects through innovative market mechanisms

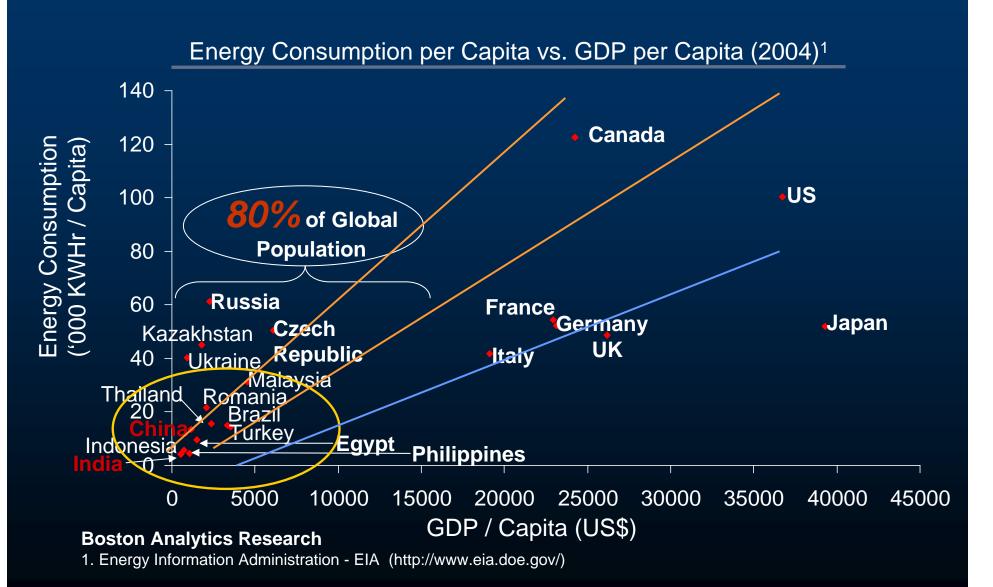
- Energy & Power Strategy
- Airports and Airstrips
- Roadways & Railways modernization
- Dockyards to match Shanghai, Yokohama and Korean Ports
- Waterways development
- Water management
- Sanitation & Recycling Strategy

Holistic Approach?

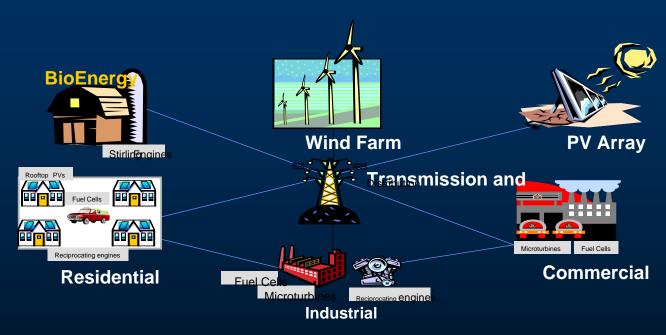
PROBLEMS ≈ **OPPORTUNITIES**



Turkey's Energy Strategy will be central toward creation of a Vibrant Economy



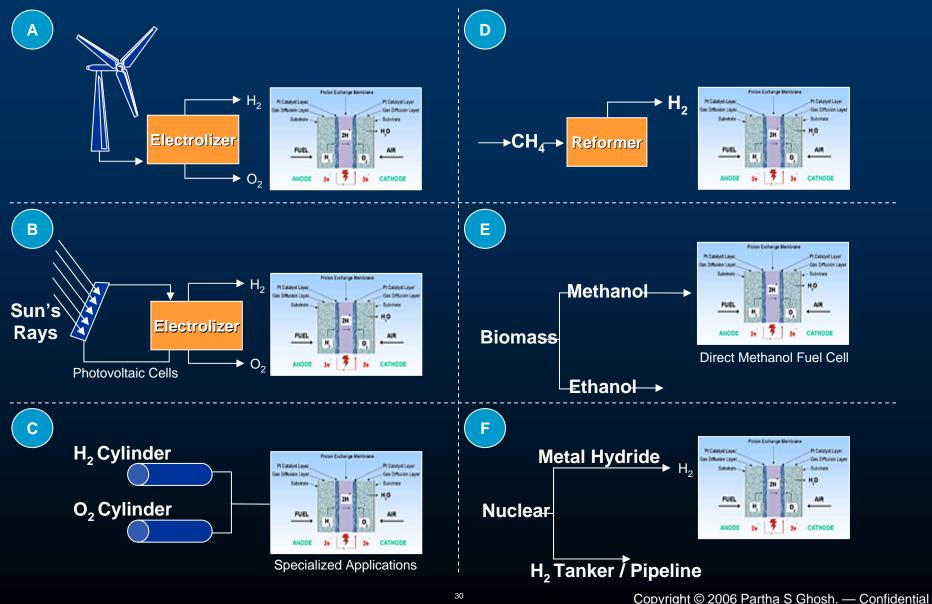
Large Scale Engineering Systems approach must drive Turkey's Vision of NextGen Distributed Power Infrastructure



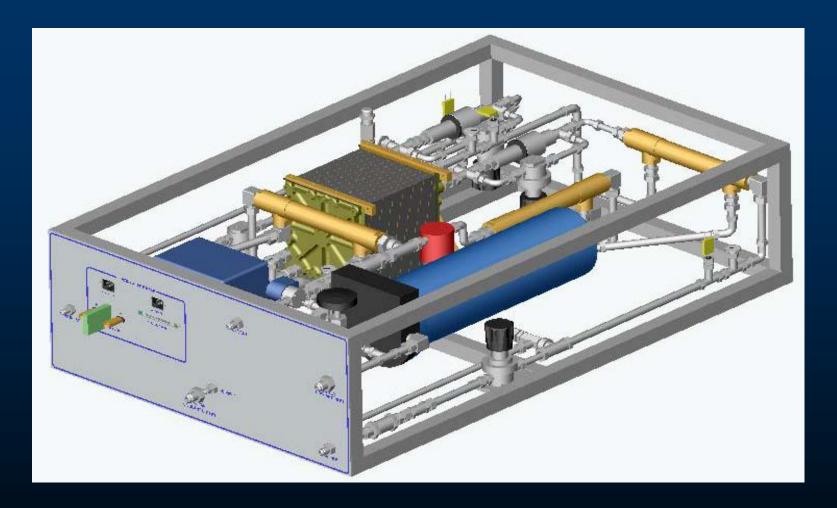
The Virtual Power Plant

- Aggregates the output of thousands of micropower technologies
- Peak shaving becomes power trading on the wholesale market
- Coordination and control through a new communications infrastructure

Not Either/Or Unification



Engineering Systems Advanced Solid Modeling Capability



Engineering Tools Include Autocad, Solidworks, Thermal Analysis System, Fortran, C++

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Turkey's New Role?

Central role in World
Affairs with prominent
Economic structure

NATO member with Middle Income Economic Stature

Accordingly the New Paradigm must Embrace both *Outside-in Thinking & Inside out Initiatives*?

The World

The Nation

Knowledge Value Chain High Influence

Key Factors: ... Some Influence

····· Key Forces:
Varying Influence

Market mechanisms

Customers

Competitors

Suppliers

Owners

Communities

Partners

Social

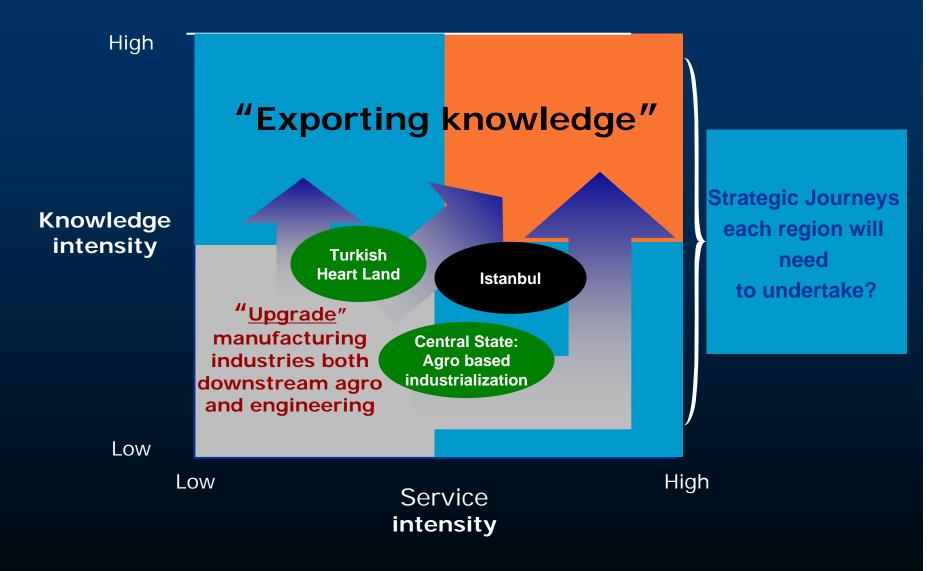
Technological

Economic

Environmental

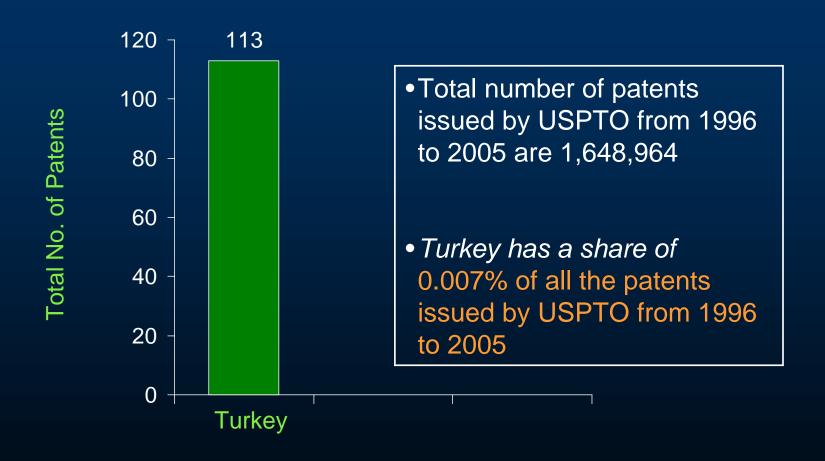
Political

Graduation of manufacturing will require development of "Hubs of Excellence" of Knowledge & Services



Turkey has to fundamentally has to significantly improve its Innovation Capacity

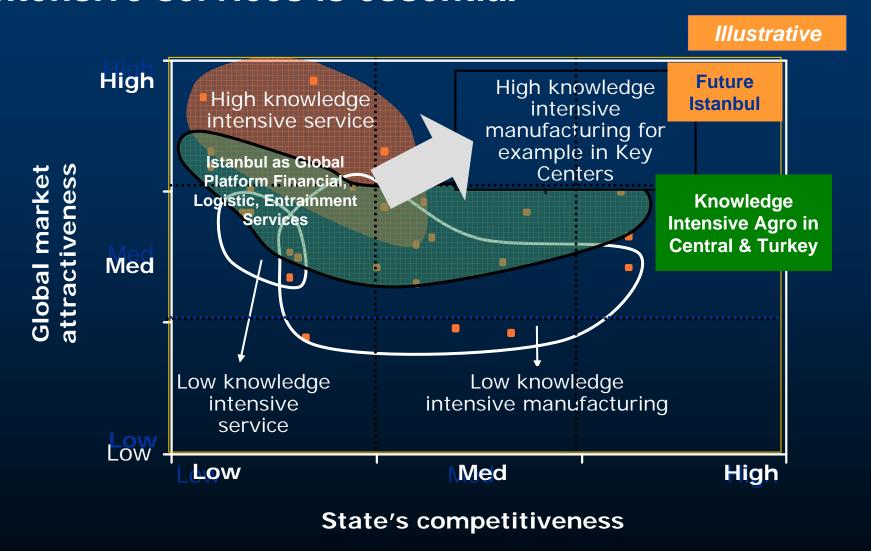
Total No. of Patents Issued by USPTO to Turkey (1996-2005)¹



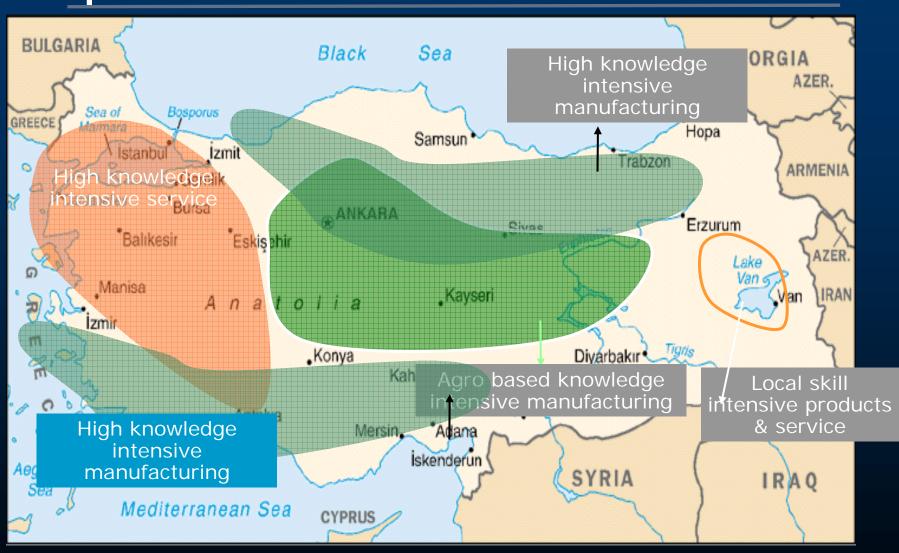
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1. "Patents counts by country/state and year, January 1. \$977 - December 31, 2005 and GP® 2006 Partha S Ghosh, — Confidential

Turkey's future competitiveness in knowledge intensive services is essential



Different regions of Turkey must be strategically developed as Growth Platforms



Turkey's Agenda

Bold Moves - Balancing Strategic with Opportunistic Plays



A Blueprint for Knowledge Based Economic Development

- Positive attitudes toward work
- Credibility and faith
- Economic Targets
 - **-GNP / capita ≥\$10,000**
 - -Exports / capita ≥\$2,000

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Dynamic Economy based on High "Social Intelligence"

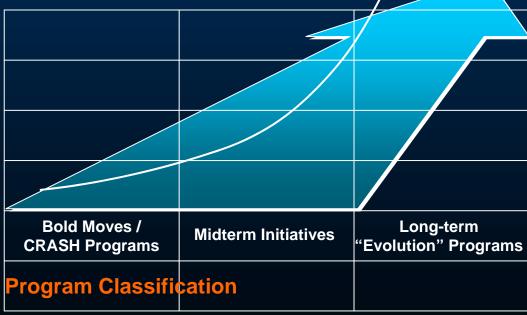
Growth Avenues

Energy

Trade

Infrastructure

Grass Roots (30%)



Examples of a Few Initiatives:

- 1. Develop a Vision Paper from outside in view with the support of TüSIAD
- 2. Organize a Policy forum in Turkey
- 3. Stimulate bottom up Entrepreneurship and to encourage volunteering
- 4. Spark Innovation and increase Exports: *Innovation Turkey*
- 5. Promote a top notch Management / Leadership School where US Schools end