



sustineo
ISTANBUL

Amsterdam
Airport
Area

- A perspective for Sustainability in Turkey

‘sustainability business platform’

Turkey and Netherlands at a glance



	Turkey	Netherlands
Population	75.9M	16.8M
GDP growth rate	3.03% / yr	-0.8% / yr
GDP per capita (2010-2014)**	\$10,543	\$51,590
Energy independence	28%	89%
CO ₂ emissions	4.22 tCO ₂ / capita	10.3 tCO ₂ / capita
Total energy consumption per capita	2,700kWh/yr	6,400kWh/yr
Rate of T&D power losses	15.5%	3.93%
Waste generation per capita	390 kg/yr	526 kg/yr
Sustainable Cities Index	#36	#4
Human Development Index	#69	#4

* Energy numbers for TR are 2014, NL 2013; HDI 2013; SCI 2015

References:

** WB Data <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

Energy Research Estore, <https://estore.enerdata.net/>

Waste Atlas, <http://www.atlas.d-waste.com/>

UNDP HDI Index; Arcadis Sustainable Cities Index 2015

• Environmental pressures due to

- population growth (1.3% ave 2010-2014* WB data)
- industrialisation
- urbanisation (73% 2014 WB data, increasing)



Social and economic challenges:

- Very populated West (primarily Istanbul)
- Regional concentrations in investments
- Irregular urbanisation, sprawl
- Lack of housing, irregular housing
- Unemployment
- Inadequate infrastructure



- Environmental challenges
 - climate change, desertification, deforestation, water scarcity, nature degradation and marine pollution
- New legislation and institutional practices
 - Efforts for compliance with the EU environmental acquis
 - Efforts in aligning with EU standards
 - Construction: Horizon 2020, Build Upon Project Partner (along with 14 European Countries – NL not listed), Co-creating Europe’s Renovation Strategies

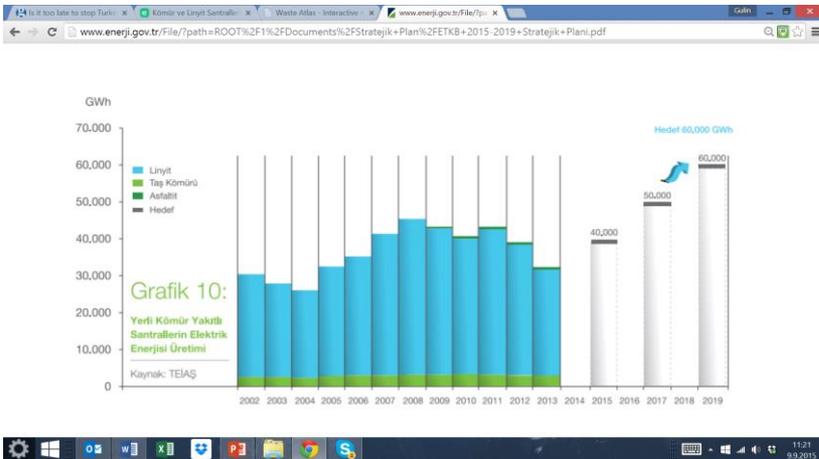


- Some facts from National State of the Environment Report (2007-2011):
 - Reductions in air pollution (29 % ↓PM₁₀, and 43%↓ SO₂)
 - lowest levels of per-capita GHG emissions among the OECD countries
 - Decrease in total water consumption by 4.4% since 2008
 - 4% annual increase in the number of people served with wastewater treatment
 - Increase in municipal waste collection by 3.8% (2008-2010)
 - Number of landfills increased due to urbanisation
 - 25% increase the amount of hazardous waste treated (2009-2010)
 - Centre of genetic diversity for plants
 - Characteristics of Europe Siberia, Mediterrenian and Iranian regions
 - In Turkey, there are 12000 taxons of species (equal to total of Europe) and sub-species, 3000 are endemic.
 - 8.1% of the total surface area of Turkey is protected



- Overall,
 - Progress in
 - waste management, noise control, industrial pollution control and risk management, forestry, erosion control, and in the quality of its water and air
 - Additional legislative and institutional efforts need to be made in
 - nature protection, chemicals, climate change and water management
 - Convergence with the EU environmental acquis requires
 - investment, both in human and institutional capacity development
 - environmental monitoring, inspection and reporting
 - Turkey is a party to all key international environmental conventions
 - committed to the United Nations Framework Convention on Climate Change
 - intentions not only domestic measures but also bilateral and multilateral cooperation and support (developed / developing country structure)

- Controversially, TR has new plans for coal:
 - In 2012, new plans for coal have been announced
 - 34 plants; 80 new plants in the pipeline (60K GWh by 2019)



Ministry of Energy 2014-2018 Strategic Energy Plan
<http://www.enerji.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FStratejik+Plan%2F2014-2018+Stratejik+Plan.pdf>



The coal power station near the town of Zonguldak. Photograph: Sean Smith for The Guardian

5% of electricity to come from sun by 2023:

“The government thinks that in the short term it will be faster to grow the economy with coal. But that creates short-term wealth that is exhausted very quickly and results in a low quality of life. When there is solar energy potential, when you can create value added jobs and manufacturing, why would you have coal?” Pelin Yenigün Dilek, Partner, Sustineo Ist and economist at the Centre for Economics and Foreign Policy Studies in Istanbul for the Guardian Aug6, '15, Is it too late to stop Turkey's coal rush? By Damian Carrington

- Nuclear

- TR has plans for three nuclear reactors. Two are tendered:

- Akkuyu : Russia, \$20B investment

- Risks: Location (sea temperature, close to middle east), biodiversity extinction, waste dumping, technology (GenIII+ but not tested)
- EU Warning: Compliance in construction acc to EU law is expected. (EU Commission, Energy Union VP M. Sefronic, June 2015)

- Sinop: Japan & France, \$20B investment

- Risks: Technology (not tested), environmental damage



References:

Greenpeace Report, May 3, 2013

Tema Report [www.tema.org.tr/web_14966-](http://www.tema.org.tr/web_14966-2_1/entitalfocus.aspx?primary_id=1340&target=categorial1&type=2&detail=single)

[2_1/entitalfocus.aspx?primary_id=1340&target=categorial1&type=2&detail=single](http://www.tema.org.tr/web_14966-2_1/entitalfocus.aspx?primary_id=1340&target=categorial1&type=2&detail=single)

Turkish Ministry of Energy data, www.energy.gov.tr

- Turkey's Tenth Development Plan (2014-2018)
 - Sustainability , core for development
 - Promotes eco-efficiency and cleaner technologies
 - Turkey has been diversifying its energy mix by increasing the use of renewables. Today , renewables constitute 29% of power generation capacity in Turkey (primarily hydro)



[Ministry of Energy 2014-2018 Strategic Energy Plan](http://www.enerji.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FStratejik+Plan%2FETKB+2015-2019+Stratejik+Plani.pdf)

<http://www.enerji.gov.tr/File/?path=ROOT%2F1%2FDocuments%2FStratejik+Plan%2FETKB+2015-2019+Stratejik+Plani.pdf>

- 3rd Airport
 - Capacity 150M passengers/yr; 6 pist
 - #1 (Atlanta Airport with 94M passengers)
 - Biggest tender in TR history: €22.1B
 - Won by a consortium of 6 companies
 - Expected to be operational by Oct '17
- 3rd Bridge
 - Planned to be operational by Oct 2015
 - 320m high – highest suspension bridge World wide
 - Won by a consortium of 5 groups (including Chinese)



- 658k trees planned to be cut, 1.1M to be relocated
- 70 lakes and water reserves under risk of drying
- Traffic to increase by 120%
- Migration routes for birds endangered

(*) ref ÇED report

(**) TEPAV, N. Emrah Aydınonat , Mayıs2013 N201324

Questions / discussions prevail:

- ***Financially feasible?***
- ***Capacity needed?***
- ***Environmental damage well planned?***
- ***All other risks for being a hub considered?***
- ***Not in compliance with 2009 Environmental Regulation Report!***



• Urban Regeneration Act

- For claimed risk areas, government offers additional tax incentives to construction companies to develop projects for re-newing households in the area and with redesign, increasing household capacity for additional occupants.
- Istanbul is leading in regeneration. 2014 only:
 - About 80k units were found risky
 - About 20k units are torn down to be re-build
- It is an economic as well as social and environmental issue for residents



About Istanbul:

- 2% annual growth of population
- Population density: 2559 people/km²
- City on earthquake zone
- Irregular housing, infrastructure

Land development and healthy housing are critical issues

- **Piyalepaşa Urban Reneneration Project**
 - One of the biggest private urban regeneration projects (property size, value)
 - Challenge: Convert exiting lifestyles + attain newcomers
 - Risks: Social as well as economical



- Piyalepaşa Sustainability includes:
 - Retention of existing residents
 - Fair valuing of existing property
 - Accomodation support
 - 'Low' operating costs
 - Energy efficiency measures
 - Additional income from operations to lower costs
 - Increase well being of the neighborhood
 - Skill development workshops
 - Hiring from community
 - Scholarships offered for community residents
 - Environmental
 - Reserve , grow green
 - Energy from renewable resources
 - Medium sized buildings, in line with city architecture
 - Well-being
 - Park, social gathering areas – half of the land area
 - Access to all kinds of public transport
 - Cultural activities; neighborhood concept
 - Cultural reservation
 - Special architecture (Selcuk) in line with neighborhood's history
 - www.piyalepasa.com



Ref: Piyalepaşa A.S., with permission

Istanbul Cyclists



<http://www.bisikletgrubu.com/>

Amsterdam Cyclists



Last but not the least, despite the journey to be 'cycled', we do believe that there is hope for sustainability in Turkey..

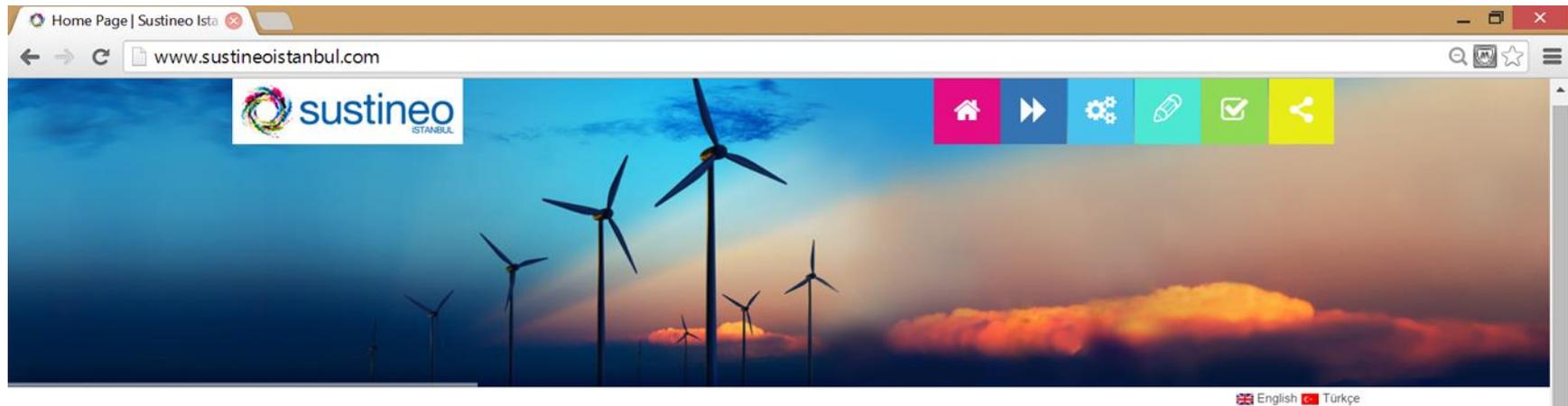
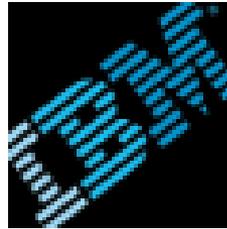
Thank you..

Gulin Yucel

gulin@sustineoistanbul.com

About Gulin Yuçel

- Social Entrepreneur
- Consultant
- Sales Professional
- Executive
- Angel Investor
- Civil Society Member
- Academician



'sustainability business platform'

 INTELLIGENCE <p>Through intelligence services at Sustineo-Istanbul, we aim to help companies position themselves within their ecosystem.</p>	 ENGAGEMENT <p>At Sustineo Istanbul, we believe that sustainability in organisations can be achieved with good planning, integrated execution and effective governance.</p>	 MEASUREMENT & REPORTING <p>Our role as Sustineo Istanbul is to consult companies in building systems to prioritize, measure, and report what matters</p>	 MEDIA & EVENTS <p>At Sustineo Istanbul, we aim to be environmentally regenerative through our media coverage and with specific activities.</p>
---	---	---	---