
Long Term Strategic Approach: Economic Diversification in Saudi Arabia

Albara Tawfiq

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Content

Why does the Kingdom Need to Diversify its Economy ?

Economic planning in the Kingdom for diversification

Current approach, initiatives and co-benefits

Conclusion

Background on Economic Diversification

- ◆ Decision was adopted in Doha 24.cp/18
 - ▣ To enable Countries to report their actions and plans for economic diversification actions that have co-benefit of emission reduction and adaptation to climate change
 - ▣ To enable countries to address their economic diversification as a priority for future emission reduction plans in different economic sectors

Economic Diversification in the Paris Agreement

- ▣ **Decision 128:** Identifying actions that could significantly enhance the implementation of adaptation actions, including actions that could enhance economic diversification and have mitigation co-benefits;
- ▣ **Article 4:** Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans can contribute to mitigation outcomes under this Article.
- ▣ **Article 7:** Building the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources.

Why does the Kingdom need to diversify its economy?

Saudi Arabia:

- ▣ **Area:** 2,150,000 km²
- ▣ **Population:** 29,994,272

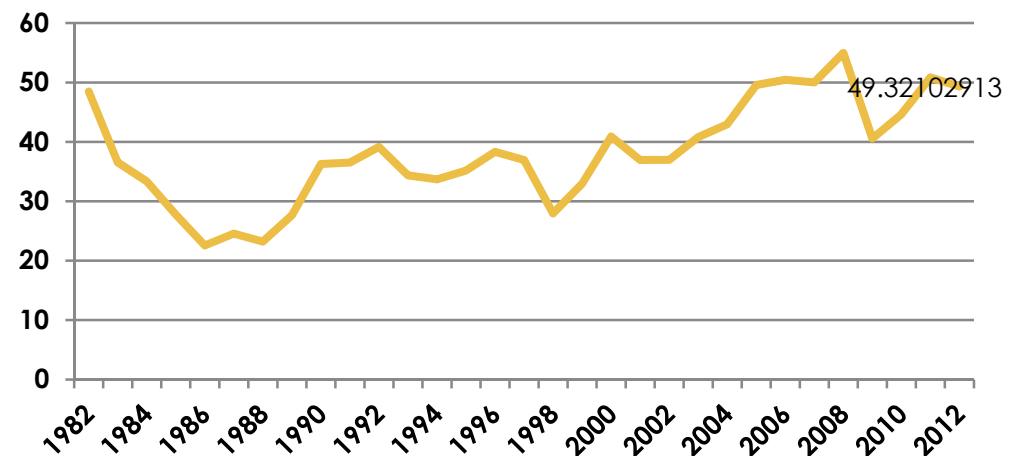


Saudi Arabia is demanded to produce oil and stabilize the market while addressing the impacts of climate change policies and catering for its developmental needs

Why does the Kingdom need to diversify its economy?

- Heavy reliance on a single source income
- Revenues from oil exports reports:
 - 92% of total government revenues
 - 49.8% of GDP

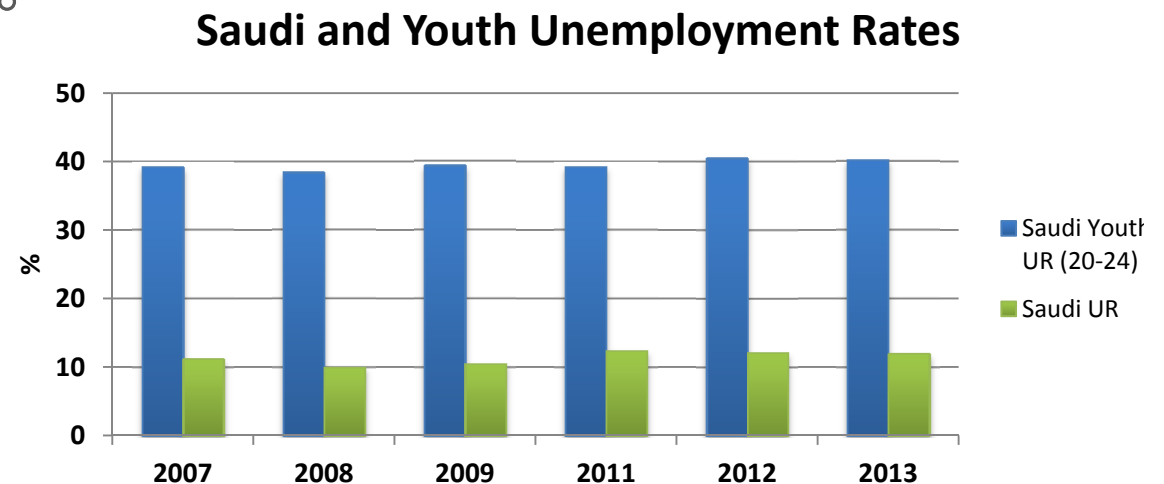
**Oil Sector Share of GDP
in Nominal Terms (%)**



Unemployment: Oil not the solution

Fast growing population with high unemployment rate:

- Saudi population around 30 million
- Growth rate 2.2%
- Unemployment rate 12%



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International Component

- Decision 24/CP.18 introduced international obligations to work on this issue and connect it to our Economic Diversification progress.
- Since then we have been working to link all climate policy issues as part of Economic Diversification and Adaptation Plans.
- Decision 24/CP. 18 helped the Kingdom integrate climate concerns into Economic Diversification planning in understanding how we want Economic Diversification.

Economic planning emphasizing economic diversification

- ▣ Saudi Arabia policies focused on economic diversification for nearly four decades
- ▣ Initiative-based economic diversification approach
- ▣ 5-year Development Plans: starting from First (1970) to Seventh (2000), with clear diversification objectives:
 - *Reduce dependency on oil as the main source of national income;*
 - *Increase the value added to oil prior to exporting;*
 - *Diversify the sources of national income; and*
 - *Expand the production base of services, industry and agriculture*

Recent evolution of objectives to “promising sectors” and then “sustainable development

- **Eighth Development Plan (2005-2009)**
 - Same objectives but introducing the concept of **promising sectors**;
- **Ninth Development Plan (2010-2014)**
 - Same objectives but introducing diversification within **Sustainable Development**
 - Expanding the absorptive and productive capacities of the national economy and enhance its competitiveness

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Summary

Saudi Vision 2030



رؤية 2030 VISION 2030

المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

Here are some of the initiatives launched by the Saudi government to ensure the actualization of its ambitious Vision 2030:



Saudi Aramco Strategic Transformation program:
"We believe that Saudi Aramco has the ability to lead the world in other sectors besides oil, and it has worked on a sweeping transformative program that will position it as a leader in more than one sector"



Public Investment Fund Restructuring program:
"Having worked on restructuring the fund, we are now refining its investment capabilities and enabling the fund to manage a broader portfolio of current and new assets"



Human Capital program:
"This program will measure, assess and analyze the efficiency of our civil service. It will also support our government agencies with staff, studies, consultations, and strategic partnerships related to human capital"



National Transformation program:
"We are identifying opportunities for partnering with the private sector, as well as innovative administrative and funding approaches. We are detailing specific initiatives that have clear performance indicators"



Strategic Partnerships program:
"We are working with our economic partners around the world to build new strategic partnerships for the twenty-first century, in harmony with our national Vision, so that we can be a trade hub connecting three continents and enhance our exports"



Privatization program:
"Our goal is to create a comprehensive privatization program that will make use of international best practices, transfer knowledge and achieve our goals in a balanced and scientific manner"

Future Climate Policy and Economic Diversification (INDCs)

Our economic diversification activities and the promising integrated approach will lead to:

- Efficiency across all sectors and advance co-benefit on Climate Policy
- Co-benefits (INDCs)
- Develop clean energy technologies to diversify our energy mix
- Adaptive resilience to the negative impacts of climate change and response measures

Economic Diversification with Mitigation Co-Benefits (INDCs)

1. Increasing energy efficiency
2. Utilizing renewable energies such as solar and wind
3. Developing carbon capture utilization and storage, and CO₂ enhanced oil recovery
4. Switching from liquid to gas including through methane recovery and utilization
5. Innovating and conducting Research and Development (R&D) in the area of clean energy

Adaptation actions with Mitigation Co-Benefits (INDCs)

1. Water conservation, which will reduce emissions from desalination, reducing the need for water generated from desalination plants required to cover water demand.
2. Urban planning, which will reduce transportation-related emissions.
3. Marine protection, which will reduce emissions from coastal vegetation (Blue Carbon).
4. Reduced desertification, which will lead to forestry-related carbon sequestration.

Energy efficiency across sectors

Power



- Establish power plant efficiency guidelines

Buildings



- Increase HVAC EER
- Compliance with updated building code

Industry



- Compliance with new energy efficiency guidelines for fuel allocation

Transportation



- Implement new fuel economy standards
- Implement clean fuel projects

Urban planning



- Introduce mass transit
- Expand freight train infrastructure

Environment



- Improve water conservation
- Introduce waste-to-energy

Three Strategic Areas to Reach the Kingdom's Economic Goals

1 Saving energy across all sectors



2 Growing and diversifying our energy supply



3 Creating opportunities for sustainable economic growth



Recommendations for saving energy across all sectors

1

Saving energy across all sectors



Energy for buildings

- Update and enforce building codes, including improving “building envelope”
- Reform electricity prices to induce lower consumption

Energy for industry

- Retrofit plant equipment to improve efficiency
- Optimize allocation of energy across different industry sectors
- Reform electricity prices to induce lower consumption

Energy for transportation

- Improve fuel efficiency of transport fleet
- Accelerate plans for urban mass transit and rail
- Reform prices to incentivize more efficient use

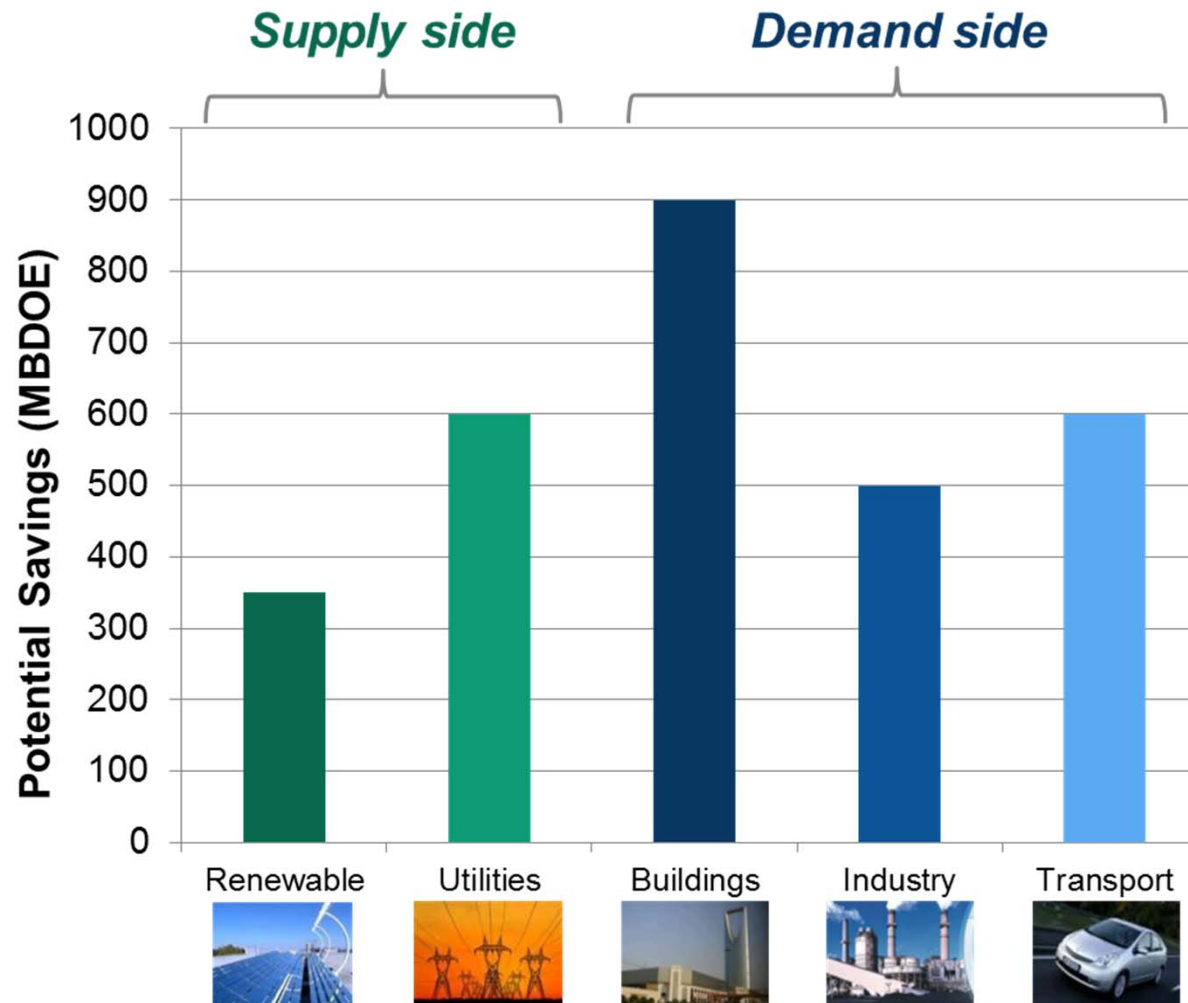
Energy for power generation and water desalination

- Improve efficiency of power generation and water desalination
- Strengthen transmission and distribution
- Increase efficiency of water supply
- Improve efficiency of water usage and manage demand

Cross-cutting enablers

- Establish an energy efficiency fund

Energy Efficiency programs could deliver substantial savings by 2030



Recommendations for growing and diversifying energy supply

2 Growing and diversifying our energy supply



Diversifying the power mix

- Limit power generation from liquid fuels
- Increase generation from natural gas
- Introduce renewable and alternatives into the power mix

Developing further hydrocarbon resources

- Enhance oil recovery
- Intensify search for commercially viable unconventional gas resources

Cross-cutting enablers

- Establish international knowledge transfer to improve capabilities on topics like fracking and renewable energy
- Give governmental financial support for renewables deployment
- Designate a national champion to roll out renewables in the first phase of deployment

Technology development and diversification of energy mix

Renewables



- Introduce renewable sources to the power mix
- Introduce solar-desalination

Nuclear



- Introduce nuclear energy to the power mix

Natural Gas



- Expand non-associated gas projects
- Explore the unconventional gas potential in the Kingdom
- Switch utility plants to be gas based

Regional Connectivity



- Establish regional connectivity across with neighboring countries

Carbon Capture & Storage

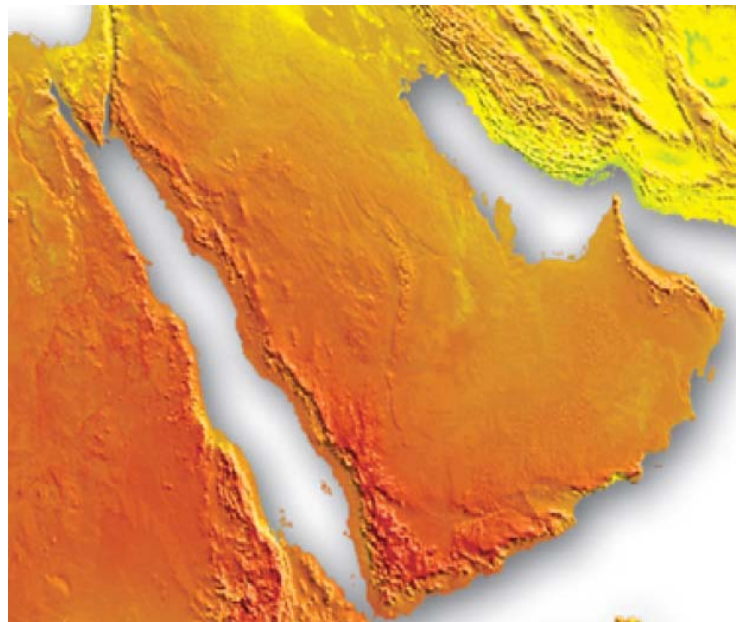
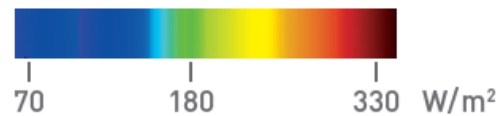


- Develop carbon capture utilization and storage technologies

The Kingdom has natural advantages in solar nationwide and wind in certain areas

HIGH SOLAR IRRADIATION

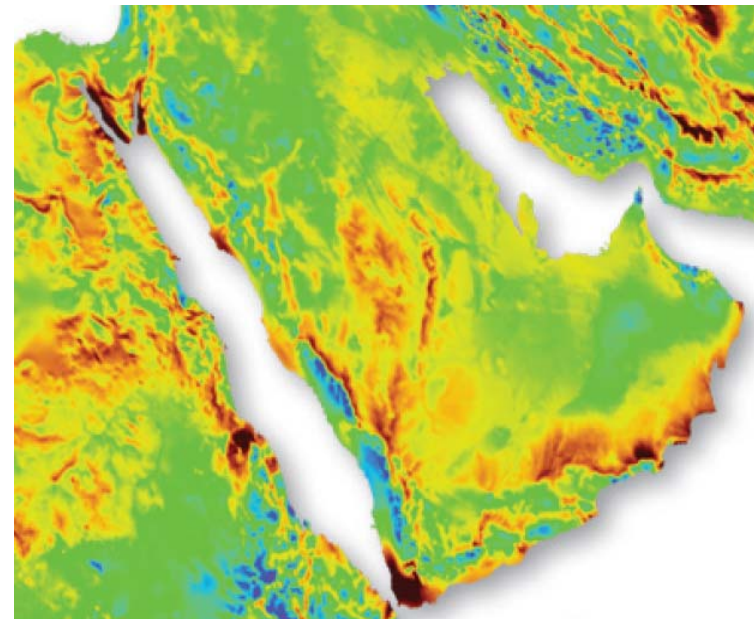
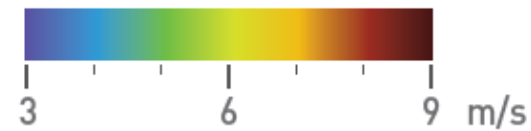
Global Horizontal Irradiance



- Average hours of sunlight: 9.3
- KSA has high solar radiation levels well above the economic threshold for solar power generation

STRONG WIND POTENTIAL IN PLACES

Wind speed



- Threshold for economic sites ~6.9 m/s average wind speed

Recommendations for creating opportunities for sustainable economic growth

3 Creating opportunities for sustainable economic growth



Job creation and economic development in the energy sector

- Localize oil and gas equipment manufacturing and services
- Set up energy service companies
- Setup renewable energy manufacturing cluster

Job creation and economic development in industry

- Promote basic anchor industries to support downstream industries
- Develop downstream industry clusters

Cross-cutting enablers

- Improve the business environment Enforce regulations promoting local content

Conclusion

- ▣ Climate Policy and some economic vulnerabilities present complex challenges to KSA long-term growth
- ▣ KSA has a pressing need to diversify economy to build a stable and resilient economy
- ▣ Decision 24/ Cp.18 advanced the integration of climate co-benefits into economic diversification
- ▣ Recent Government initiatives aim at achieving economic diversification through a sustainable development path that advances climate policy
- ▣ Such activities introduce several climate co-benefits leading to energy efficiency, development of clean energy technologies, etc.
- ▣ International Climate policy and international community can advance these efforts

Thank you
