



A RAIA profile on: Prime Minister and Crown Prince

# Mohammed bin Salman Al Saud

Third part of a five series on climate leaders ahead of the 2023 United Nations Climate Change Conference

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# **Table of Contents**

Introduction	3
Snapshot of MBS	3
Is MBS a climate leader?	3
Family and its Dynamics	4
Relationship with his father	5
Start of the political career	5
Mohammed bin Salman's Stake	<b>7</b>
Environmental Challenge Nº1 - Rising temperatures and consequent desertification	7
Environmental Challenge Nº2 - Air pollution	8
Environmental Challenge N°3 - Water scarcity and water resources	
management	
Mohammed bin Salman's Defining Moment	
Mohammed bin Salman's Solutions	
NEOM Project	_
The Middle East and Saudi Green Initiatives	18
Hydrogen usage	19
Mohammed bin Salman's Impact	19
NEOM Project	20
Middle East and Saudi Green Initiative	23
Hydrogen	25
Conclusion	26
Annex:	29
Bibliography	31

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#### Introduction

# **Snapshot of MBS**

Mohammed bin Salman, widely known as MBS, is the Crown Prince and Prime Minister of Saudi Arabia. His family has ruled over Saudi Arabia since 1932. He is a prominent figure in Saudi Arabia, the seventh son of King Salaman and the de-facto leader of the country.1 He also served as the Minister of Defense from 2015 to 2022. After becoming the Crown Prince in 2017, he started various ambitious reforms and initiatives. They eventually led to the creation of the ambitious Vision 2030 project aimed at diversifying Saudi's economy from oil to alternative sources such as renewable energy, wind, and solar power. After the oil price crisis in 2014-2016, the Kingdom of Saudi Arabia started to look for ways to be more sustainable and various sources of income for the country. Vision 2030, through the Middle East and Saudi Green Initiatives, strives to improve the water and air quality as well as to cut greenhouse gas emissions. Additionally, he launched several campaigns striving to fight corruption at the highest level.<sup>2</sup> He presents himself as a leader of a new generation that seeks to reform Islam<sup>3</sup> and turn Saudi Arabia into an attractive country for foreign investors through green projects. However, oftentimes his actions and policies receive both regional and international criticism.4

#### Is MBS a climate leader?

Yes, Mohammed Bin Salman is a climate leader, but his commitment to renewable energy has been seen by some as a way to secure long-term economic stability and reduce the reliance on oil revenue rather than a genuine climate change leadership effort.

Mohammed Bin Salman launched the ambitious Saudi Vision 2030 initiative to address climate change concerns. At the heart of this vision is the goal of diversifying the Saudi economy away from oil by investing in various sectors, including renewable energy. The flagship program under this initiative is the Saudi Renewable Energy Project, which aims to significantly increase the

<sup>&</sup>lt;sup>1</sup> FRONTLINE. "Timeline: The Rise of Saudi Arabia's Prince Mohammed Bin Salman," n.d. <a href="https://www.pbs.org/wgbh/frontline/article/timeline-the-rise-of-saudi-arabias-prince-mohammed-bin-salman/">https://www.pbs.org/wgbh/frontline/article/timeline-the-rise-of-saudi-arabias-prince-mohammed-bin-salman/</a>.

<sup>&</sup>lt;sup>2</sup> FRONTLINE. "Timeline: The Rise of Saudi Arabia's Prince Mohammed Bin Salman," n.d. https://www.pbs.org/wgbh/frontline/article/timeline-the-rise-of-saudi-arabias-prince-mohammed-bin-salman/.

<sup>&</sup>lt;sup>3</sup> Nabil. "The Evolving Relationship between Religion and Politics in Saudi Arabia." Arab Center Washington DC, April 20, 2022.

https://arabcenterdc.org/resource/the-evolving-relationship-between-religion-and-politics-in-saudi-arabia/.

<sup>&</sup>lt;sup>4</sup> Sofuoglu, Murat. "Is Saudi Arabia Going Downhill under Crown Prince Mohammed Bin Salman?" Is Saudi Arabia going downhill under Crown Prince Mohammed bin Salman?, 2019. https://www.trtworld.com/magazine/is-saudi-arabia-going-downhill-under-crown-prince-mohammed-bin-salman-31041.

country's capacity for renewable energy generation, including solar and wind power. Bin Salman has also set a target to achieve 50% of the nation's electricity generation from renewable sources by 2030.

While these efforts demonstrate a willingness to transition towards a more sustainable energy mix, critics argue that the Crown Prince's motivations are multifaceted. One key aspect is the desire to reduce the economic vulnerability associated with oil price fluctuations and shifts in global energy demand. By embracing renewable energy, Saudi Arabia can position itself as a leader in the evolving energy landscape, potentially attracting foreign investment and enhancing its global image.

# Family and its Dynamics

Mohammed bin Salman is the Crown Prince and Prime Minister of Saudi Arabia. He was born in Riyadh on August 31, 1985, in the family of Salman bin Abdulaziz Al Saud and his third wife, Fahda bint Falah bin Sultan bin Hathleen. She is the granddaughter of Rakan bin Hithalayn, renowned as the former head of the Al Ajman tribe. This tribe played an essential role in the politics of eastern Arabia in the 18th and early 20th centuries. MBS is the eldest son of his mother and the seventh child of his father. When he was born, his father served as the mayor of Riyadh, the capital city, and held this position for 48 years before ascending to the throne as King in 2015.<sup>5</sup>

According to the Prince, the concept of discipline and respect for the elderly members of the family was always cultivated. The current King and his wife did everything to give their children the best education and opportunities. The Young Prince was obliged to read a book weekly and discuss it with his father. This way, the idea of intellectual discussion was always present in MBS's life.<sup>6</sup>

MBS has mentioned on multiple occasions<sup>7</sup> that the way he is ruling his country presently has been shaped by two factors. The first is the type of education he received. He did not go to study abroad, unlike his brothers. His father wanted him to be raised closer to family values and traditions. This way, Salman bin Abdulaziz Al Saud planned to make MBS his advisor in the future. The second factor is the technology and access to it that MBS had from his early years. It is

<sup>&</sup>lt;sup>5</sup> "Mohammed Bin Salman | Biography, Education, & Facts." In *Encyclopædia Britannica*, 2019. https://www.britannica.com/biography/Mohammed-bin-Salman.

<sup>&</sup>lt;sup>6</sup> World History: Famous Personalities. "Mohammed Bin Salman Biography." Accessed July 2, 2023. https://whfpdubai.com/biography/mohammed-bin-salman.

<sup>&</sup>lt;sup>7</sup> ABC News. "This Leader Imprisoned Members of His Own Family in a Ritz-Carlton. It Was a Popular Move." February 8, 2023.

 $<sup>\</sup>underline{\text{https://www.abc.net.au/news/2023-02-09/who-is-mohammed-bin-salmans-mbs-saudi-arabia/101901392}.$ 

important to note that his generation was the first one to experience the digitalization of society.<sup>8</sup>

He completed his high school education in Riyadh and was among the kingdom's ten best students. Later on, he pursued his studies at King Saud University, doing a law major. He graduated in 2007 as the second-best student in his class. Afterwards, he had plans to study abroad. However, his father, who was already working in the government at the time, had different plans for his son. King Salman always wanted his son to follow his father's path. Following a period in the private sector where MBS founded a number of companies and nonprofit organisations with the intention to promote entrepreneurship in the country as well as working as a consultant for the Experts Commission, he eventually became an advisor to his father, Salman bin Abdulaziz Al Saud, who was then serving as the mayor of Riyadh.<sup>9</sup>

# Relationship with his father

During his childhood years and later, MbS was incredibly close to his father, witnessing his ruling and leadership style. This significantly influenced MBS's work as a Crown Prince and helped his rise to power. Even though his father had three older sons who were alive when their father became the King, MBS was the oldest one from his father's third marriage and the King had more hopes for him. According to the Saudi succession rule, after the king dies, the oldest alive brother succeeds the throne, not the son. However, in the last few decades, there have been a few exceptions to this rule. When King Salman took the throne in 2015, he nominated Mohamud bin Nayef, the old king's nephew as his successor. It was also done because the three brothers of King Salaman who were still alive were too old to be appointed as Crown Prince or were just sidelined in the succession games earlier.

However, things changed over time. In 2017, King Salman upended the royal line of succession and appointed his own son MBS as a Crown Prince. The decision to appoint his son to this position was attributed to various factors, such as securing a smooth succession within the royal family and implementing specific policies and reforms that the King deemed important. Additionally, Muhammad bin Nayef was put under house arrest. He was also relieved of all positions by royal decree.

### Start of the political career

Before MBS got into politics in 2015, he worked in the private sector, establishing several firms and served as the Riyadh Competitive Council's secretary general, a

<sup>&</sup>lt;sup>8</sup> House of Saud. "Mohammed Bin Salman, the Saudi Prince," May 1, 2022. https://houseofsaud.com/MBS-the-saudi-prince/.

<sup>&</sup>lt;sup>9</sup> House of Saud. "Mohammed Bin Salman, the Saudi Prince," May 1, 2022. https://houseofsaud.com/MBS-the-saudi-prince/.

special advisor to the King Abdulaziz Foundation chairman of the board, and a trustee on the Albir Society for Development's board of trustees.<sup>10</sup> When King Abdullah died and MBS's father, Salman, became king, Mohammed was appointed the defence minister.<sup>11</sup> In this role, he demonstrated his pragmatic, modern, and uncompromising leadership style throughout seven pivotal years for Saudi Arabia. Notably, his first impactful move in this position was launching a full-scale military intervention in Yemen.<sup>12</sup> Later that year, he was also appointed deputy crown prince.

After becoming crown prince in 2017, MBS began his quest to transform Saudi Arabia through both domestic measures and foreign policy.<sup>13</sup> It included, for instance, the reduction of religious influence, the elimination of religious police, and the improvement of women's position in society. Additionally, the Crown Prince's most recent career advancement includes his appointment as Saudi Arabia's prime minister on September 27th, 2022. Previously, such titles were held by the king.

# Controversies and public image

Saudi Arabia is an authoritarian state with severe repressions of civil liberties, free media, and ongoing violations of human rights. Ever since MBS became the de-facto leader of Saudi Arabia, the situation only intensified. For instance, bin Salman's efforts to counter corruption have been used as a justification for a targeted campaign against Saudi political and business elites. As showcased in the 2017 purge, when a number of prominent Saudi Arabian princes, government ministers, and business people were arrested because of corruption charges.<sup>14</sup>

In the foreign policy domain, MBS is known for its assertive actions in the region. Saudi Arabia was involved in the diplomatic crisis in Qatar in 2017, intervention in the Yemen civil war and proxy conflicts with Iran throughout the region. As of the most recent developments, tensions have been rising after the Russian invasion of Ukraine, which has introduced several developments in Saudi foreign policy, such as the easing of long-standing disagreements between Moscow and Riyadh over conflicts in the Middle East and MBS' personal relationships with other world

https://www.businessinsider.com/saudi-arabia-anti-corruption-purge-arrests-100-billion-2017-11?international=true&r=US&IR=T.

www.aljazeera.com. "Who Is Saudi Arabia's Crown Prince Mohammed Bin Salman?," n.d. <a href="https://www.aljazeera.com/features/2017/12/14/profile-crown-prince-mohammed-bin-salma">https://www.aljazeera.com/features/2017/12/14/profile-crown-prince-mohammed-bin-salma</a>. 
Tathom. "Book Review | MBS: The Rise to Power of Mohammed Bin Salman." Accessed July 2, 2022.

https://fathomjournal.org/book-review-MBS-the-rise-to-power-of-mohammed-bin-salman/. 
<sup>12</sup> Robinson, Kali. "Yemen's Tragedy: War, Stalemate, and Suffering." Council on Foreign Relations, October 21, 2022. <a href="https://www.cfr.org/backgrounder/yemen-crisis">https://www.cfr.org/backgrounder/yemen-crisis</a>.

<sup>&</sup>lt;sup>13</sup> ISPI. "How MbS Is Rethinking Saudi Nationalism," n.d.

https://www.ispionline.it/en/publication/how-mbs-rethinking-saudi-nationalism-23083.

<sup>&</sup>lt;sup>14</sup> Jacobs, Peter. "Saudi Arabia Has Detained More than 200 People in an Anti-Corruption Purge That Touched \$100 Billion." Business Insider. Accessed July 30, 2023. https://www.businessinsider.com/saudi-arabia-anti-corruption-purge-arrests-100-billion-2017-11?

leaders. In the past few years, tensions have grown with the West, primarily the United States. Meanwhile, MBS has also been cooperating more with Russia and China.

The presented report will discuss MBS as a climate leader through a comprehensive analysis of his stake, defining moment, policies, and their impact. After the introductory part, the report will include an explanation of the leader's stake in what are the environmental challenges of Saudi Arabia at the moment. Moreover, it will include the answer to a critical question for understanding the climate pursuits of MBS: What are his motivations in bringing climate policies to Saudi Arabia? The next part will be dedicated to the moment that has defined MBS as a climate leader. This will include a discussion of the 2014-2016 oil price crisis and its impact. The fourth section will focus on the specific policies as a part of climate advocacy undertaken by MBS: Neom Project, Middle East and Saudi Green Initiatives, and hydrogen as a way to foster energy transition. Lastly, the impact of the policies discussed above will be presented.

# Mohammed bin Salman's Stake

The following section of the report will focus on describing the main environmental challenges faced by MBS and Saudi Arabia, as well as provide a discussion of the leader's stake in being a climate leader. It is crucial for our analysis to understand the underlying environmental issues of the country and the motivation of MBS to resolve them. Saudi Arabia encounters various environmental challenges influenced by the country's geography and the rapid urbanisation rate of its population:

# Environmental Challenge N°1 - Rising temperatures and consequent desertification

As Saudi Arabia is characterised by almost non-existent arable lands (1.6%)<sup>15</sup> and primarily desert landscapes, it suffers greatly from the negative impact of desertification. To start with, desertification is a process of the gradual disappearance of vegetation that occurs in arid and semi-arid lands<sup>16</sup> for various reasons and implies non-desert ecosystems becoming such. The consequence is the fact that rural areas are becoming increasingly inhabitable.

Rising temperatures contribute to the process of desertification as well as increase the chances of extreme weather events. These can destroy civilian infrastructure and affect the population: Outcomes for Saudi Arabia include

<sup>16</sup> Iberdrola. "What Is Desertification? Discover Its Causes and Consequences." Iberdrola, 2022. https://www.iberdrola.com/sustainability/desertification.

<sup>&</sup>lt;sup>15</sup> data.worldbank.org. "Arable Land (% of Land Area) - Saudi Arabia | Data," n.d. <a href="https://data.worldbank.org/indicator/AG.LND.ARBL.ZS?locations=SA">https://data.worldbank.org/indicator/AG.LND.ARBL.ZS?locations=SA</a>.

droughts, sand storms, and dust storms.<sup>17</sup> Moreover, rising temperatures will also contribute to prolonged periods of unusually low rainfall that lead to a water shortage. Droughts are detrimental to the ecosystems of Saudi Arabia, as the production of food and sourcing of water are affected.<sup>18</sup> Moreover, droughts bring about increased costs of living, reduced crop production, and water shortages.<sup>19</sup>

Rural areas and agriculture are being negatively affected by rising temperatures and urban residential areas. Population living in cities can feel the consequences of elevated heat levels being manifested in the negative impact on citizens' physical health.<sup>20</sup> Furthermore, the significance of intensified warmth comes from it causing worsened living conditions, several regions becoming possibly unlivable for several months of the year, and human and animal deaths.

# Environmental Challenge N°2 - Air pollution

Currently, Saudi Arabia is the second country in the world after Qatar in the rankings of the highest levels of air pollution registered in 2021.<sup>21</sup> Saudi Arabia's primary type of terrain is desert, which explains why dust is the primary source of air pollution in Saudi Arabia.<sup>22</sup> The higher the temperatures and the rates of desertification, the more frequent sand and dust storms are. Thus, exacerbated by the rising impact of rising temperatures, air pollution negatively affects citizens' health. Climate change will only decrease the air quality further<sup>23</sup> which will result in the worsening of the health of the Saudis, and environmental degradation is inevitable. Air pollution also implies several economic consequences, such as a reduction of economic growth in the long run.<sup>24</sup> Indeed, air pollution results in lost working days because of air pollution-induced health problems, increased health expenditures, and an increase in welfare costs for the

<sup>&</sup>lt;sup>17</sup> Al-Surf, Mohammed. "Saudi Arabian Cities at Risk: The Urgent Need for Climate-Resilient Infrastructure." Sustainability Pros. in Saudi, January 10, 2023.

https://www.linkedin.com/pulse/saudi-arabian-cities-risk-urgent-need-infrastructure-al-surf/.

18 ———. "Middle East Countries Face Extreme Heat Risk, Study Finds." www.aljazeera.com, May 23,

https://www.aljazeera.com/news/2023/5/23/middle-east-countries-face-extreme-heat-risk-studv-finds.

<sup>&</sup>lt;sup>19</sup> Al-Surf, Mohammed. "Saudi Arabian Cities at Risk: The Urgent Need for Climate-Resilient Infrastructure." Sustainability Pros. in Saudi, January 10, 2023.

https://www.linkedin.com/pulse/saudi-arabian-cities-risk-urgent-need-infrastructure-al-surf/.

<sup>&</sup>lt;sup>20</sup> "G20 CLIMATE RISK ATLAS," 2021. https://files.cmcc.it/g20climaterisks/SaudiArabia.pdf.

<sup>&</sup>lt;sup>21</sup> "G20 CLIMATE RISK ATLAS," 2021. https://files.cmcc.it/g20climaterisks/SaudiArabia.pdf.

<sup>&</sup>lt;sup>22</sup> G77 & China - Briefing on GSTP. "Saudi Intervention on Air Pollution/Atmosphere," February 28, 2022. <a href="https://sustainabledevelopment.un.org/content/documents/saudiarabia\_1mav\_air.pdf">https://sustainabledevelopment.un.org/content/documents/saudiarabia\_1mav\_air.pdf</a>.

<sup>&</sup>lt;sup>23</sup> CDC. "Climate Change Decreases the Quality of the Air We Breathe," n.d. https://www.cdc.gov/climateandhealth/pubs/AIR-QUALITY-Final\_508.pdf.

<sup>&</sup>lt;sup>24</sup> Murshed, Muntasir. "The Impacts of Fuel Exports on Sustainable Economic Growth: The Importance of Controlling Environmental Pollution in Saudi Arabia." *Energy Reports* 8 (November 2022): 13708–22. <a href="https://doi.org/10.1016/j.egyr.2022.09.186">https://doi.org/10.1016/j.egyr.2022.09.186</a>.

state as well as an overall reduction in the GDP.<sup>25</sup> The above-mentioned trend is also intensified due to the rapid urbanisation rate, putting citizens' health at risk.

# Environmental Challenge N°3 - Water scarcity and water resources management

Saudi Arabia has no permanent rivers or lakes on its territory. Without the ordinary low levels of rainfall and the continued temperature increase, the kingdom is at serious risk of water scarcity. Therefore, Saudi Arabia had to look for multiple ways of accessing water. Mainly, sources of water include desalination, surface water, and mining of non-renewable groundwater<sup>26</sup>

As mentioned earlier, limited rainfall leads to scarce water availability in Saudi Arabia. Moreover, Saudi Arabia is influenced by elevated temperatures: changed rainfall patterns and faster evapotranspiration<sup>27</sup> only worsen the situation of availability of water resources. Evapotranspiration is a combined process of evaporation of liquid from the surface and transpiration happening simultaneously.<sup>28</sup> The higher the surface temperature, the faster the process will be, contributing to droughts and desertification.

The issue of water scarcity is further deteriorated by the overconsumption and lack of renewable water sources<sup>29</sup> in Saudi Arabia. It has been claimed that Saudi Arabia is determined to scale the groundwater supply, yet, rising temperatures pose a threat to this solution as well.<sup>30</sup> This will happen due to higher temperatures leading to faster exhaustion of existing groundwater supplies unless alternative sources are available.

Overall, the decreased water availability and increased demand for clean water pose a severe risk for Saudi Arabia. Despite efforts being undertaken, the potential groundwater depletion in the long term is possible if Saudi Arabia doesn't explore alternative solutions.

Saudi Arabia faces numerous severe environmental challenges that require policymaking and solutions immediately. Otherwise, they will result in detrimental effects on Saudi Arabia. As the Kingdom is an authoritarian government, those detrimental consequences will be blamed upon the government and MBS as the

<sup>&</sup>lt;sup>25</sup> The Economic Consequences of Outdoor Air Pollution. OECD, 2016. https://doi.org/10.1787/9789264257474-en.

<sup>&</sup>lt;sup>26</sup> "G20 CLIMATE RISK ATLAS," 2021. https://files.cmcc.it/g20climaterisks/SaudiArabia.pdf.

<sup>&</sup>lt;sup>27</sup> "G20 CLIMATE RISK ATLAS," 2021. https://files.cmcc.it/g20climaterisks/SaudiArabia.pdf.

<sup>&</sup>lt;sup>28</sup> www.fao.org. "Chapter 1 - Introduction to Evapotranspiration," n.d. <a href="https://www.fao.org/3/x0490e/x0490e04.htm">https://www.fao.org/3/x0490e/x0490e04.htm</a>.

<sup>&</sup>lt;sup>29</sup> Bradbury, Connor. "Water Crisis in Saudi Arabia." The Borgen Project, July 10, 2020. <a href="https://borgenproject.org/water-crisis-in-saudi-arabia/">https://borgenproject.org/water-crisis-in-saudi-arabia/</a>.

<sup>&</sup>lt;sup>30</sup> DeNicola, Erica, Omar S. Aburizaiza, Azhar Siddique, Azhar Siddique, Haider Khwaja, and David O. Carpenter. "Climate Change and Water Scarcity: The Case of Saudi Arabia." *Annals of Global Health* 81, no. 3 (November 27, 2015): 342. <a href="https://doi.org/10.1016/j.aogh.2015.08.005">https://doi.org/10.1016/j.aogh.2015.08.005</a>.

de-facto ruler by the population. Therefore, having understood the environmental problems Saudi Arabia is faced with, it is key to discuss the persona of Mohammed bin Salman and how he addresses those issues before the population blames him. An omnipresent example for the al-Saud family is the so-called Arab Spring when populations across the Middle East took to the streets protesting against their leaders.

# Why does Mohammed bin Salman care?

To understand the motives behind Mohammed bin Salman's pushing for climate policies, it is important to mention the al-Saud dynasty's role and its continued strive for power. It is crucial to know that al-Saud control is based on oil revenues in and outside Saudi Arabia. These revenues allow MBS to retain Saudi Arabia's domestic hegemony due to the unique nature of the Saudi Arabian social contract - "No taxation, no representation." An illustration of this idea is the events of the Arab Spring. In 2011 Saudi Arabia directed US\$150 billion 33 to its citizens and the Gulf Cooperation Council (GCC) neighbours in social spending to lower the social tensions in the country. This reinforced the role of oil money as a tool for establishing domestic hegemony.

Moreover, youth plays an important role in the transformation of Saudi Arabia. MBS is aiming through his policies to increase youth employment, especially since youth unemployment was a big driving force behind the Arab Spring.<sup>34</sup> A high percentage of the young population combined with the pressing risk of diversifying the economy and creating jobs for this young population puts the country's stability at risk<sup>35</sup> as well as pressure on its leader.

Furthermore, MBS has also been using oil revenues to sustain the regional hegemony of Saudi Arabia based on oil money. The first important factor is that

<sup>&</sup>lt;sup>31</sup> Kinninmont, Jane. "Vision 2030 and Saudi Arabia's Social Contract Austerity and Transformation." Chatham House, July 20, 2017.

 $<sup>\</sup>frac{https://www.chathamhouse.org/sites/default/files/publications/research/2017-07-20-vision-20}{30-saudi-kinninmont.pdf}.$ 

<sup>&</sup>lt;sup>32</sup> Policy, Law and Public, Arabic, and Middle East & Africa. "To Stave off Arab Spring Revolts, Saudi Arabia and Fellow Gulf Countries Spend \$150 Billion." Knowledge@Wharton, September 21, 2011. <a href="https://knowledge.wharton.upenn.edu/article/to-stave-off-arab-spring-revolts-saudi-arabia-and-fellow-gulf-countries-spend-150-billion/">https://knowledge.wharton.upenn.edu/article/to-stave-off-arab-spring-revolts-saudi-arabia-and-fellow-gulf-countries-spend-150-billion/</a>.

<sup>&</sup>lt;sup>33</sup> Policy, Law and Public, Arabic, and Middle East & Africa. "To Stave off Arab Spring Revolts, Saudi Arabia and Fellow Gulf Countries Spend \$150 Billion." Knowledge@Wharton, September 21, 2011. <a href="https://knowledge.wharton.upenn.edu/article/to-stave-off-arab-spring-revolts-saudi-arabia-and-fellow-gulf-countries-spend-150-billion/">https://knowledge.wharton.upenn.edu/article/to-stave-off-arab-spring-revolts-saudi-arabia-and-fellow-gulf-countries-spend-150-billion/</a>.

<sup>&</sup>lt;sup>34</sup> "Youth Unemployment in the Arab World Is a Major Cause for Rebellion." *International Labour Organization*, April 5, 2011.

https://www.ilo.org/global/about-the-ilo/mission-and-objectives/features/WCMS\_154078/lang --en/index.htm.

<sup>&</sup>lt;sup>35</sup> Ahmad, Amjad. "Is Saudi Arabia Ready for Its Youth Bulge?" BRINK – Conversations and Insights on Global Business, November 24, 2021.

https://www.brinknews.com/is-saudi-arabia-ready-for-its-youth-bulge/.

Saudi Arabia is regarded as a Custodian of Islam foundation<sup>36</sup> - the King has the title of Custodian of the Two Holy Mosques. Second, Saudi Arabia uses oil revenues to carry out its petrodollar diplomacy. As an illustration, Saudi Arabia sent US\$46 billion from 2013 to 2020 to Egypt,<sup>37</sup> \$3bn to Sudan <sup>38</sup> and \$5bn to Turkey<sup>39</sup> to channel its leadership role in the region. If Saudi Arabia does not give money anymore, the importance of rivals will grow. Indeed, "considering regional power shifts after 2011 and domestic changes after 2015, the conditions of Saudi Arabian foreign policy have altered dramatically and provided the country an unprecedented window of opportunity to establish hegemony within the Arab world."40

At the same time, Iran, Qatar, UAE, and Turkey are becoming important actors in this battle for power. This is done through, for instance, Iran inciting rivalry with Saudi Arabia through proxy wars in the region. Iran is also trying to achieve power through geostrategic cooperation with Russia in Syria and developing economic ties with China, 41 while smaller Gulf states are also rising. UAE, for instance, is a crucial factor in an anti-Iran coalition.<sup>42</sup> Similar to Turkey, which is seeking "a more independent foreign policy from the United States and the North Atlantic Treaty Organization (NATO)"43 to establish itself as a leader in the Middle East. Thus, rivals have the potential and motivation to become the next regional hegemon, so oil money revenues as a tool to support itself as a regional power are vital for MBS.

Most importantly, the oil price crisis made Saudi Arabia understand the possible

<sup>&</sup>lt;sup>36</sup> Kinninmont, Jane. "Vision 2030 and Saudi Arabia's Social Contract Austerity and Transformation." Chatham House, July 20, 2017.

https://www.chathamhouse.org/sites/default/files/publications/research/2017-07-20-vision-20 30-saudi-kinninmont.pdf

<sup>&</sup>lt;sup>37</sup> Nereim, Vivian, and Vivian Yee. "No More Blank Checks: Saudi Arabia Clamps down on Regional Aid." The New York Times, April 2, 2023, sec. World.

https://www.nvtimes.com/2023/04/02/world/middleeast/no-more-blank-checks-saudi-arabiaclamps-down-on-regional-aid.html.

<sup>38</sup> Abdelaziz, Khalid. "Sudan Secures Saudi Promise to Deliver \$1,5 Billion in Pledged Aid- Sources." Reuters, March 11, 2021, sec. Middle East & Africa.

https://www.reuters.com/article/uk-sudan-economy-saudi-idUSKBN2B31KV.

<sup>&</sup>lt;sup>39</sup> Turak, Natasha. "Saudi Arabia Drops \$5 Billion in Turkey's Central Bank to Help Its Struggling Economy." CNBC, March 6, 2023. https://www.cnbc.com/2023/03/06/saudi-arabia-deposits-5-billion-in-turkeys-central-bank.html.

<sup>&</sup>lt;sup>40</sup> Felsch, Maximilian. "The Ascent of Saudi Arabia to a Regional Hegemon: The Role of Institutional Power in the League of Arab States." International Studies 57, no. 2 (April 2020): 132-43. https://doi.org/10.1177/0020881720911834.

<sup>&</sup>lt;sup>41</sup> Cook, Steven. "Major Power Rivalry in the Middle East Discussion Paper Series on Managing Global Disorder No. 2 March 2021." Council on Foreign Relations, March 2021. https://cdn.cfr.org/sites/default/files/report\_pdf/dp-cook-no.-2.pdf?\_gl=1.

<sup>&</sup>lt;sup>42</sup> Cook, Steven. "Major Power Rivalry in the Middle East Discussion Paper Series on Managing" Global Disorder No. 2 March 2021." Council on Foreign Relations, March 2021. https://cdn.cfr.org/sites/default/files/report\_pdf/dp-cook-no.-2.pdf?\_gl=1.

<sup>43</sup> Cook, Steven. "Major Power Rivalry in the Middle East Discussion Paper Series on Managing Global Disorder No. 2 March 2021." Council on Foreign Relations, March 2021. https://cdn.cfr.org/sites/default/files/report\_pdf/dp-cook-no.-2.pdf?\_gl=1.

threat to the oil money used to sustain domestic and regional hegemonies. When oil inevitably becomes a less reliable source of the al-Saud's power, the alternative way out of this situation is diversifying the economy. Like "the stone age did not end because the world ran out of stones, and the oil age will not end because we run out of oil." These words have been credited to Ahmed Zaki Yamani, the Minister of Oil for Saudi Arabia, for more than twenty years. 44 Still, to transform the nation, support the economy and end the oil age, heavy international investment is needed. However, diversification of the economy through international investment is complex because of the negative image MBS is associated with. This is why MBS has been so outspoken on the environment, to make Saudi Arabia more attractive to international investors and use this as an opportunity to transform the nation and maintain al-Saud's power.

Therefore, the primary motivation behind MBS pushing for climate policies is adopting internationally-approved sustainability measures because of the desire to stay in power. Climate policies are internationally attractive, and they can specifically help convince foreign investors to choose Saudi Arabia to invest despite the controversies surrounding MBS.

# Mohammed bin Salman's Defining Moment

It is impossible to analyse Mohammed bin Salman as a climate leader without dedicating special attention to the moment that defined him as such. The following section will be focused on MBS's defining moment - a turning point, an event that has shaped him into the way he is today in his climate pursuits.

The defining moment used in the analysis is the oil price crisis that took place between 2014 and 2016. The impact of the 2014-2016 oil price crisis on the entire global community cannot be underestimated. By oil price crisis, we refer to the fact that "prices (on a monthly average basis) fell from over US\$100 per barrel in July 2014 to less than half that by January 2015."45

Unlike previous price crises that occurred in 1997–1998 and 2008–2009 that were caused largely by serious economic downturns.<sup>46</sup> The 2014-2016 oil price crash was more similar to the supply-driven crisis in the 1980s. The main drivers of the crisis include the increased production of shale oil by the United States and the

<sup>&</sup>lt;sup>44</sup> Brandreth, Gyles. "Jeque Ahmed Zaki Yamani - Gyles Brandreth - Farewell to Riches of the Earth (2000) - the Telegraph PDF | PDF | Opec | Saudi Arabia." Scribd, June 25, 2000. <a href="https://ru.scribd.com/document/375419856/Jeque-Ahmed-Zaki-Yamani-Gyles-Brandreth-Farewell-to-Riches-of-the-Earth-2000-The-Telegraph-pdf">https://ru.scribd.com/document/375419856/Jeque-Ahmed-Zaki-Yamani-Gyles-Brandreth-Farewell-to-Riches-of-the-Earth-2000-The-Telegraph-pdf</a>.

<sup>&</sup>lt;sup>45</sup> Grigoli, Francesco, Alexander Herman, and Andrew Swiston. "A Crude Shock: Explaining the Short-Run Impact of the 2014–16 Oil Price Decline across Exporters." *Energy Economics* 78 (February 2019): 481–93. <a href="https://doi.org/10.1016/j.eneco.2018.11.025">https://doi.org/10.1016/j.eneco.2018.11.025</a>.

<sup>&</sup>lt;sup>46</sup> CIRSD. "Oil Shock — Decoding the Causes and Consequences of the 2014 Oil Price Drop - CIRSD." 2014.

https://www.cirsd.org/en/horizons/horizons-spring-2015--issue-no3/oil-shock-%E2%80%94-decoding-the-causes-and-consequences-of-the-2014-oil-price-drop.

decreased demand from markets.<sup>47</sup> The sudden increased production capacity of shale oil in the US, supply reductions in the Middle East, and OPEC's 2014 decision to stop price controls contributed to the crisis. Later on, disappointingly slow growth undermined further demand expectations.<sup>48</sup> On a global scale, the collapse in oil prices caused fiscal and structural policy reforms. Declined oil revenues meant declined investment and output. For Saudi Arabia specifically, this demonstrated "the need for both vertical diversification in oil, gas, and petrochemical sectors, as well as horizontal diversification beyond these sectors. with an emphasis on technological upgrades and competitiveness."49 Therefore, Saudi policymaking should be aimed at supporting investment in human capital, encouraging entrepreneurship, and increasing employment in a diversified private sector.50

It is essential to understand that Saudi Arabia has a unique position and consequent influence in the Organization of the Petroleum Exporting Countries (OPEC) due to its unique swing supplier position.<sup>51</sup> This means that Saudi Arabia can, in a timely manner, increase its oil production depending on the market conditions. Saudi Arabia is the only oil producer that can do so in case of a supply shortage. "On pretty short notice, it can add a couple of million barrels a day — about 2 per cent — to global oil supplies."52

Therefore, when the 2014 -2016 crisis started, everyone expected Saudi Arabia to take action to push prices up - more precisely, cut production. However, it did not resort to such measures. By not doing so, Saudi Arabia "abandoned its role as the oil market's swing supplier, handing control over the oil price back to the market and letting the price of crude fall freely."53 Saudi Arabia could afford this hit to their oil revenues due to significant amounts of foreign reserves at their disposal. However, oil revenues constitute 50% of the Saudi GDP, which accounts for 70% of

 $<sup>^{47}</sup>$  ———. "What Triggered the Oil Price Plunge of 2014-2016 and Why It Failed to Deliver an Economic Impetus in Eight Charts." World Bank Blogs, January 18, 2018.

https://blogs.worldbank.org/developmenttalk/what-triggered-oil-price-plunge-2014-2016-andwhy-it-failed-deliver-economic-impetus-eight-charts.

<sup>&</sup>lt;sup>48</sup> Stocker, Marc, John Baffes, and Dana Vorisek. "Special Focus 1: With the Benefit of Hindsight: The Impact of the 2014-16 Oil Price Collapse." Global Economic Prospects, January 26, 2018, 49-71. https://doi.org/10.1596/978-1-4648-1163-0\_focus1. 49 Ibid

<sup>50</sup> Ibid

<sup>&</sup>lt;sup>51</sup> mepc.org, "Saudi Arabia and the Oil Price Collapse | Middle East Policy Council," n.d. https://mepc.org/speeches/saudi-arabia-and-oil-price-collapse.

<sup>&</sup>lt;sup>53</sup>CIRSD. "Oil Shock — Decoding the Causes and Consequences of the 2014 Oil Price Drop -CIRSD," 2014.

https://www.cirsd.org/en/horizons/horizons-spring-2015--issue-no3/oil-shock-%E2%80%94-dec oding-the-causes-and-consequences-of-the-2014-oil-price-drop.

the total export revenue,<sup>54</sup> which implies that the economy of Saudi Arabia suffered from this crisis. With oil exports accounting for such a high percentage of budget revenues and GDP, the Saudi economy was one of the most affected in the world by this crisis.<sup>55</sup> While Saudi Arabia, owing to large foreign reserves, had an advantage compared to many other states, a prolonged oil price crisis would mean austerity measures that could negatively affect domestic support for the ruling family.<sup>56</sup>

The decision not to intervene on the OPEC level and cut production to bring prices up artificially brought short-term economic damage but also a geopolitical benefit for Saudi Arabia since the crisis hurt its political rival Iran and an ally of Syria - Russia.<sup>57</sup> Mohammed bin Salman, serving as a defence minister at the time of the crisis, witnessed the impacts of this crisis on his country. The essence of this defining moment for Mohammed bin Salman is the realisation that oil depletion poses a severe risk. Using oil revenues is not a sustainable source of development for the country, and a diversified economy is needed for the al-Saud family to stay in control domestically and in the Middle East.

Having understood the stake of Mohammed bin Salman and what was the moment that defined him in his climate pursuits, the next section will provide an explanation of the most prominent policies undertaken by MBS. Following the witnessed crisis, MBS, with the services of McKinsey as a basis for the plan, immediately laid out a transformation plan.<sup>58</sup> As the most comprehensive reform policy in Saudi Arabia, Vision 2030 is a detailed development plan with a multitude of projects and policies encompassing all spheres of life. It has a goal "to transform the country into a sustainable, diverse, and globally influential nation."

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<sup>&</sup>lt;sup>54</sup> Ali, Anis. "VOLATILITY of OIL PRICES and PUBLIC SPENDING in SAUDI ARABIA: SENSITIVITY and TREND ANALYSIS." *International Journal of Energy Economics and Policy* 11, no. 1 (December 1, 2020): 165–72. https://doi.org/10.32479/ijeep.10601.

<sup>&</sup>lt;sup>55</sup> CIRSD. "Oil Shock — Decoding the Causes and Consequences of the 2014 Oil Price Drop - CIRSD." 2014.

https://www.cirsd.org/en/horizons/horizons-spring-2015--issue-no3/oil-shock-%E2%80%94-decoding-the-causes-and-consequences-of-the-2014-oil-price-drop. 56 lbid

<sup>&</sup>lt;sup>57</sup> F. Gregory Gause. "Sultans of Swing? The Geopolitics of Falling Oil Prices." Brookings Doha Center, April 2015.

https://www.brookings.edu/wp-content/uploads/2016/06/Falling-Oil-Prices-English.pdf.

<sup>&</sup>lt;sup>58</sup> Grand, Stephen, and Katherine Wolff. "ASSESSING SAUDI VISION 2030: A 2020 REVIEW." *Atlantic Council*, June 17, 2020.

https://www.atlanticcouncil.org/wp-content/uploads/2020/06/Assessing-Saudi-Vision-2030-A-2020-review.pdf.

<sup>&</sup>lt;sup>59</sup> KAPSARC. "China's BRI and Saudi Vision 2030: A Review to Partnership for Sustainability," n.d. <a href="https://www.kapsarc.org/research/publications/chinas-bri-and-saudi-vision-2030-a-review-to-partnership-for-sustainability/">https://www.kapsarc.org/research/publications/chinas-bri-and-saudi-vision-2030-a-review-to-partnership-for-sustainability/</a>.

### Mohammed bin Salman's Solutions

It is stated that "Vision 2030 focuses on creating a vibrant society, economic drivers, and developing the nation through international exchanges and networks." Indeed, the idea of V2030 is to transform all spheres of Saudi society. The project consists of 96 strategic objectives and a multitude of projects encompassing the entire nation. In the context of the con

# **NEOM Project**

NEOM is a flagship project of Vision 2030. NEOM is a development project aimed at creating a new way of living that is technologically advanced, sustainable, and embodies the future. The name of the area is formed from the Greek word "neo" - new, and Arabic 'Mustaqbal' - future, envisioning this project as the new future. 62

It was presented by MBS in 2017 during the Future Investment Initiative conference that took place in Riyadh.<sup>63</sup> The NEOM Project comprises several sub-projects, including the Line, Oxagon, Sindalah, and Trojena.<sup>64</sup> Even though Line City is getting the most international attention, NEOM will also comprise the "centre for advanced and clean industries Oxagon, mountain destination Trojena, and luxury island resort Sindalah." It is described as the "advancement of humanity and the embodiment of a vision in terms of technology."<sup>65</sup>

One of the projects that have attracted the most international attention, which is beneficial for Saudi Arabia and MBS, is the Line.<sup>66</sup> It is a 170 km long line city, "developed as a cornerstone of Saudi Vision 2030 and an economic engine for the Kingdom."<sup>67</sup> It is aimed at diversification, and its goal is to contribute 380,000

<sup>&</sup>lt;sup>60</sup> KAPSARC. "China's BRI and Saudi Vision 2030: A Review to Partnership for Sustainability," n.d. <a href="https://www.kapsarc.org/research/publications/chinas-bri-and-saudi-vision-2030-a-review-to-partnership-for-sustainability/">https://www.kapsarc.org/research/publications/chinas-bri-and-saudi-vision-2030-a-review-to-partnership-for-sustainability/</a>.

<sup>&</sup>lt;sup>61</sup> Vision 2030. "Vision 2030 Overview." Vision 2030, 2022. https://www.vision2030.gov.sa/v2030/overview/.

<sup>&</sup>lt;sup>62</sup> Neom. "About." neom.com, 2022. https://www.neom.com/en-us/about.

<sup>&</sup>lt;sup>63</sup> Al Arabiya English. "Saudi Crown Prince Launches NEOM, a '\$500bn Investment in the Future," October 24, 2017.

https://english.alarabiya.net/business/economy/2017/10/24/Saudi-Crown-Prince-announces-launch-of-NEOM-destination-for-the-future-.

<sup>64</sup> Vision 2030. "Neom," n.d. https://www.vision2030.gov.sa/v2030/v2030-projects/neom/.

<sup>&</sup>lt;sup>65</sup> Al-sayed, Amna, Faizah Al-shammari, Areej Alshutayri, Nahla Aljojo, Eman Aldhahri, and Omar Abouola. "The Smart City-Line in Saudi Arabia: Issue and Challenges." *Postmodern Openings* 13, no. 1 Sup1 (March 14, 2022): 15–37. https://doi.org/10.18662/po/13.1sup1/412.

<sup>&</sup>lt;sup>66</sup> Smith, Elliot. "The Line: Ushering in the Future or a Smokescreen for Repression?" Brown Political Review, December 9, 2022.

https://brownpoliticalreview.org/2022/12/the-line-a-smokescreen-for-repression-in-saudi-arabia/.

<sup>&</sup>lt;sup>67</sup> World Architecture Community. "Saudi Arabia Reveals Plans for 100-Mile-Long Linear City Named 'the Line," January 19, 2021.

https://worldarchitecture.org/article-links/egvzm/saudi-arabia-reveals-plans-for-100milelong-linear-city-named-the-line-.html.

jobs of the future and SAR180 billion (US\$48 billion) to domestic GDP by 2030."<sup>68</sup> As mentioned previously, creating employment is crucial for MBS, this is why Vision 2030 and NEOM, in particular, strive to make sure the youth is ready for a new work culture, which is implemented through compensation with entertainment packages in a liberalised society that is becoming more globalised.

The Line prides itself on its strategic location, as it will connect four distinctive ecologies: Coastal, Coastal Desert, Mountain, and Upper Valley.<sup>69</sup> It was designed as well to be "a direct answer to the issues of urban expansion that are impeding the advancement of civilization, such as deteriorating infrastructure, environmental pollution, and urban and population sprawl."<sup>70</sup>

The second but equally important part of NEOM is Oxagon: an innovation-based, cutting-edge, technology-filled industrial hub. It will be the heart of industry at NEOM, aiming to create a new model for production, entrepreneurship, and community. It is also planned to be the largest floating structure in the world. Sustainability is a pillar for the entire NEOM, and Oxagon, in particular, "will be powered solely by renewable energy and will utilise the Internet of Things, artificial and predictive intelligence, and robotics to create "a seamless, integrated, intelligent and efficient supply chain."

The third project inside NEOM is Trojena: a mountain destination oriented on year-round entertainment. It will have four seasons: Wellness (Sep-Nov), Winter (Dec-Mar), Adventure (Mar-May), and Lake (May-Sep).<sup>73</sup> NEOM officials claim that "Trojena will redefine mountain tourism for the world by creating a place based on the principles of ecotourism, highlighting efforts to preserve nature and enhance the community's quality of life, which is aligned with the goals of the Kingdom's Vision 2030."<sup>74</sup>

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<sup>&</sup>lt;sup>68</sup> World Architecture Community. "Saudi Arabia Reveals Plans for 100-Mile-Long Linear City Named 'the Line,'" January 19, 2021.

https://worldarchitecture.org/article-links/egvzm/saudi-arabia-reveals-plans-for-100milelong-linear-city-named-the-line-.html.

<sup>&</sup>lt;sup>69</sup> World Architecture Community. "Saudi Arabia Reveals Plans for 100-Mile-Long Linear City Named 'the Line,'" January 19, 2021.

https://worldarchitecture.org/article-links/egvzm/saudi-arabia-reveals-plans-for-100milelong-linear-city-named-the-line-.html.

<sup>&</sup>lt;sup>70</sup> Al-sayed, Amna, Faizah Al-shammari, Areej Alshutayri, Nahla Aljojo, Eman Aldhahri, and Omar Abouola. "The Smart City-Line in Saudi Arabia: Issue and Challenges." *Postmodern Openings* 13, no. 1 Sup1 (March 14, 2022): 15–37. https://doi.org/10.18662/po/13.1sup1/412.

<sup>&</sup>lt;sup>71</sup> neom.directory. "What Is OXAGON? - NEOM News & Suppliers Directory." https://neom.directory/what-is-oxagon.

<sup>&</sup>lt;sup>72</sup> NEOM. "HRH Prince Mohammed Bin Salman Announces the Establishment of OXAGON, the Largest Floating Industrial Complex in the World." www.prnewswire.co.uk, November 16, 2021. https://www.prnewswire.co.uk/news-releases/hrh-prince-mohammed-bin-salman-announces-the-establishment-of-oxagon-the-largest-floating-industrial-complex-in-the-world-829147223.html.

<sup>&</sup>lt;sup>73</sup> ———. "TROJENA." www.neom.com, 2022. <a href="https://www.neom.com/en-us/regions/trojena">https://www.neom.com/en-us/regions/trojena</a>.

<sup>74</sup> www.neom.com. "HRH Prince Mohammed Bin Salman Announces TROJENA, the Mountains of NEOM," March 3, 2022. <a href="https://www.neom.com/en-us/newsroom/hrh-prince-announces-trojena">https://www.neom.com/en-us/newsroom/hrh-prince-announces-trojena</a>.

Lastly, Sindalah: a luxury island destination comprising 840.000m² of the area and highlighting the biodiversity of the Red Sea.<sup>75</sup> It is necessary to point out that it will be the first part of NEOM to open to the public in 2024, so it will give the first impression of the project's overall execution to the world. Sindalah is a luxury tourism and lifestyle destination oriented towards the yachting community that will feature three luxury resorts, golf clubs, and retail shops while focusing on strict sustainability and design.<sup>76</sup>

The goals of NEOM Project<sup>77</sup> include economic diversification, attracting FDI, attracting global talent, and creating industry hubs. It is designed to foster innovation and collective know-how as well as increase global connectivity. Another pillar of NEOM, sustainability, implies the use of renewable energy. To achieve this, Saudi Arabia is building a hydrogen plant in Oxagon<sup>78</sup> and plans to launch a US\$186 million solar panel factory in Tabuk owing to favourable regional insolation rates.<sup>79</sup> NEOM also strives to excel in wildlife conservation, resource efficiency, and social infrastructure. Overall, the goal is to become a new model for future smart cities and urban sustainability.<sup>80</sup>

This policy is strategically designed to support MBS in achieving his objectives by focusing on financial aspects. NEOM is planned as a project that will attract a significant amount of foreign investment, which Saudi Arabia and MBS need to diversify away from oil. This project will also stimulate economic growth and make Saudi Arabia a hub for various emerging technologies. As NEOM is considered to be the most important and internationally-known project, it is a great marketing and branding opportunity to fix Saudi Arabia's image and MBS as the leader of the country. At the same time, NEOM places great importance on sustainability. Therefore, it will help demonstrate the alignment of MBS with the sustainable development course. If successful, such a robust project will ensure that MBS and Saudi Arabia maintain their regional supremacy, reinforce their international prestige, and rebrand MBS as a reformer and a visionary leading the country to great success.

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https://www.blackridgeresearch.com/project-profiles/the-line-and-neom-city-project-saudi-arabia.

<sup>75</sup> www.neom.com. "Sindalah," n.d. https://www.neom.com/en-us/regions/sindalah.

<sup>&</sup>lt;sup>76</sup> www.neom.com. "Sindalah," n.d. https://www.neom.com/en-us/regions/sindalah.

<sup>77</sup> Neom. "About." neom.com, 2022. https://www.neom.com/en-us/about.

<sup>&</sup>lt;sup>78</sup> Arab News. "Saudi Arabia's First Sustainable Guarantee Issued to Green Hydrogen Project at NEOM," June 5, 2023. <a href="https://www.arabnews.com/node/2316236/business-economy">https://www.arabnews.com/node/2316236/business-economy</a>.

<sup>&</sup>lt;sup>79</sup> Yusuf, Nadia, and Dareen Abdulmohsen. "Saudi Arabia's NEOM Project as a Testing Ground for Economically Feasible Planned Cities: Case Study." *Sustainability* 15, no. 1 (January 1, 2023): 608. <a href="https://doi.org/10.3390/su15010608.b">https://doi.org/10.3390/su15010608.b</a>

<sup>&</sup>lt;sup>80</sup> Trade Arabia. "Saudi Smart City Neom 'New Model for Sustainable Urban Design." www.zawya.com, January 22, 2023.

https://www.zawya.com/en/economy/gcc/saudi-smart-city-neom-new-model-for-sustainable-urban-design-pmeiv6r5.

<sup>&</sup>lt;sup>81</sup> www.blackridgeresearch.com. "All You Need to Know about NEOM Project in Saudi Arabia," August 2, 2022.

#### The Middle East and Saudi Green Initiatives

Apart from ambitious development projects, there are other policies put in place. In particular, the Saudi Green Initiative "unites environmental protection, energy transition, and sustainability programs with the overarching aims of offsetting and reducing emissions, increasing the Kingdom's use of clean energy, and addressing climate change." It was launched in 2021 and comprises 77 initiatives targeting three objectives: reducing emissions, greening Saudi, and protecting land and sea. To ensure implementation, the Energy and Climate Change Committee and The Environment Committee were established to oversee the implementation of initiatives and track the progress of accomplishing the targets. These bodies also are in charge of engaging the public and private sector ecosystems, ensuring coordination, and compliance with international standards." 83

Additionally, Saudi Arabia has been actively involved in the Middle East Green Initiative, which is "a regional effort led by Saudi Arabia to mitigate the impact of climate change on the region and to collaborate to meet global climate targets." It focuses on increasing regional cooperation and creating infrastructure to protect the environment and reduce its negative impact. The Middle East Green Initiative has two main targets: reducing emissions and planting trees, as well as more detailed initiatives aimed at achieving those two targets. MBS established the Middle East Green Initiative Secretariat in November 2022 as well as contributed US\$2.5 billion to the Initiative<sup>86</sup>

The Saudi Green Initiative is aimed at bringing sustainability closer to the population as well as transmitting the sense of the importance of sustainability to the population. With those initiatives involving Saudi companies and NGOs, MBS is aiming to make Saudi Arabia more sustainable and to engage the Saudi youth in sustainability efforts. The Middle East Green Initiative, on the other hand, reasserts Saudi Arabia's and MBS's position in the region and beyond. This initiative is being endorsed not only by regional states but also by the US, Russia, Brazil, France, etc.<sup>87</sup> Both initiatives help address the environmental challenges on local and regional levels that Saudi Arabia is faced with. It is also framing MBS as

<sup>&</sup>lt;sup>82</sup> Saudi & Middle East Green Initiatives. "Saudi & Middle East Green Initiatives," n.d. <a href="https://www.greeninitiatives.gov.sa/">https://www.greeninitiatives.gov.sa/</a>.

<sup>83</sup> Ibid

<sup>84</sup> Ibid

<sup>35</sup> Ibid

<sup>&</sup>lt;sup>86</sup> Reuters. "Saudi Arabia Commits \$2.5 Bln to Middle East Green Initiative - Crown Prince." *Reuters*, November 7, 2022, sec. Sustainable Business.

https://www.reuters.com/business/sustainable-business/saudi-arabia-commits-25-bln-middle-east-green-initiative-crown-prince-2022-11-07/.

<sup>&</sup>lt;sup>87</sup> Saudi & Middle East Green Initiatives. "Saudi & Middle East Green Initiatives," n.d. <a href="https://www.greeninitiatives.gov.sa/">https://www.greeninitiatives.gov.sa/</a>.

a climate leader, which improves MBS's image internationally and helps attract investment for V2030.

# Hydrogen usage

Saudi Arabia has ambitious plans to become the world leader in exporting hydrogen in the form of green ammonia. The broader policy includes investment in infrastructure and efforts aimed at achieving so. Green hydrogen is produced using solar power and wind to split water atoms. It is more expensive than oil and gas but is considered to be the future of energy transition. Therefore, it is a project with great potential for Saudi Arabia. The mega plant will produce green hydrogen at scale for global export in the form of green ammonia with a total investment of \$8.4 billion. Recently, a Saudi Arabian company Acwa Power closed the first deal on the world's biggest hydrogen plant. Additionally, hydrogen will be key for the NEOM Project, as discussed above.

Hydrogen projects aim to limit carbon emissions, promote sustainable development in Saudi Arabia, and, therefore, reinforce sustainability efforts. If successful, this policy has the capacity and potential to transform Saudi Arabia into a key player in the renewable energy transition, which will be crucial for reinforcing MBS's regional and international power. Similarly to other solutions presented above, it is aimed at limiting carbon emissions and promoting sustainable development in Saudi Arabia, thus, fortifying the diversification efforts.

# Mohammed bin Salman's Impact

Vision 2030 is poised to be a transformative force not only for Saudi Arabia but also for the entire region and the global economy. As Saudi Arabia continues to work towards these ambitious goals, the impact of Vision 2030 is already being felt, however, most of the projects are still in the early development stages and seek further investment and actual implementations. The extent of implementation can vary across different sectors and initiatives. Some areas may have advanced more than others due to factors such as economic challenges, global events, and changes in leadership priorities.

<sup>&</sup>lt;sup>88</sup> Klevstrand, Agnete . "Saudi Arabia Aims to Be World's Leading Hydrogen Exporter as It Announces \$266bn Clean Energy Plan." Hydrogen news and intelligence | Hydrogen Insight, January 31, 2023.

https://www.hydrogeninsight.com/policy/saudi-arabia-aims-to-be-worlds-leading-hydrogen-exporter-as-it-announces-266bn-clean-energy-plan/2-1-1396134.

<sup>&</sup>lt;sup>89</sup> Kobina Kane, Michael , and Stephanie Gil. <sup>4</sup>Green Hydrogen: A Key Investment for the Energy Transition." blogs.worldbank.org, June 23, 2022.

https://blogs.worldbank.org/ppps/green-hydrogen-key-investment-energy-transition.

<sup>&</sup>lt;sup>90</sup> Arab News. "Saudi Arabia's First Sustainable Guarantee Issued to Green Hydrogen Project at NEOM," June 5, 2023. <a href="https://www.arabnews.com/node/2316236/business-economy">https://www.arabnews.com/node/2316236/business-economy</a>.

<sup>&</sup>lt;sup>91</sup> Martin, Matthew, and Fahad Abuljadayel. "Saudi Arabia's Acwa Power Eyes Three More Giant Hydrogen Plants." *Bloomberg.com*, March 2, 2023.

https://www.bloomberg.com/news/articles/2023-03-02/saudi-arabia-s-acwa-power-eyes-three-more-giant-hydrogen-plants.

## **NEOM Project**

NEOM is one of the most well-known Vision 2030 projects. According to the plans, the NEOM project is currently in the building phase and is to be opened in 2039.<sup>92</sup> However, the first official footage of the project development was already released earlier last year. Those are the footage of Sindalah - a luxury island that plans to open its doors in 2024. "Construction work on Neom has begun. However, the project is still very, very much at the beginning," said Sebastian Sons, senior researcher for the German-based Center for Applied Research in Partnership with the Orient (CARPO).

According to the plans, the first part of the project is estimated to be completed by 2025.<sup>93</sup> And even though there was minimal effect of the pandemic on the project, Saudi authorities had to deal with several other challenges in order for the project to come true. The biggest challenge was financial. Saudi Arabia struggled to attract regional and international investors due to its regulatory environment, legal system and geopolitical tensions.<sup>94</sup> As a consequence, such an issue raises concerns suggesting that with the limited investment, Saudi Arabia would not be able to finish the project even by 2050.<sup>95</sup>

Diving into the actual construction progress, it becomes clear that Saudi Arabia managed to sign several crucial contracts for project existence. In September 2020, AECOM secured a contract to provide comprehensive design services for the transport and utility infrastructure of the NEOM Bay mega-project in the Kingdom of Saudi Arabia. NEOM has joined forces with Volocopter to form a joint venture company in December 2021. This partnership aims to collaborate on designing, implementing, and operating the world's first specialised public eVTOL (electric Vertical Take-Off and Landing) mobility system within the innovative city. Engineering Consultants Group (ECG) from Egypt has been awarded a design contract for the construction of five NEOM Construction Villages (NCV) in

<sup>&</sup>lt;sup>92</sup> dw.com. "Saudi Arabia's Neom: A Prestigious Project with a Dark Side – DW – 05/18/2023," n.d. https://www.dw.com/en/saudi-arabias-neom-a-prestigious-project-with-a-dark-side/a-65664704.

<sup>&</sup>lt;sup>93</sup> Construction Review Online. "Saudi Arabia: Neom City Project Timeline and All You Need to Know," November 9, 2021.

https://constructionreviewonline.com/biggest-projects/neom-city-project-timeline/.

<sup>&</sup>lt;sup>94</sup> mint. "Saudi Arabia's Got Money but Can It Also Lure Foreign Capital?," January 16, 2023. https://www.livemint.com/opinion/columns/saudi-arabia-s-got-money-but-can-it-also-lure-foreign-capital-11673889446439.html.

<sup>&</sup>lt;sup>95</sup> Salami, Mohammad. "Is Saudi Arabia's 'the Line' NEOM Project Too Ambitious?" https://www.newarab.com/, August 18, 2022.

https://www.newarab.com/analysis/saudi-arabias-line-neom-project-too-ambitious.

<sup>&</sup>lt;sup>96</sup> Sharma, Alkesh. "Saudi Arabia's Neom Appoints Aecom to Design City's Transport and Utilities Infrastructure." The National, September 15, 2020.

 $<sup>\</sup>underline{https://www.thenationalnews.com/business/technology/saudi-arabia-s-neom-appoints-aecom-to-design-city-s-transport-and-utilities-infrastructure-1.1078227.}$ 

<sup>&</sup>lt;sup>97</sup> Itoga, Akiko. "NEOM and Volocopter Establish Joint Venture to Create the World's First Bespoke Public EVTOL Mobility System." Volocopter, December 1, 2021. https://www.volocopter.com/newsroom/neom-volocopter-jv-evtol-network/.

January 2023. PMC contract awarded for NEOM International Airport project in March 2023. Those contracts are crucial in order to make the NEOM Project happen.

It is also important to note that NEOM is not just one giant project. It actually includes several initiatives that all aim at fighting some of the most pressing challenges. Climate change and global warming are among them.

The first one is Line City. The first phase of which is to be completed by 2030.<sup>98</sup> The earthwork started in October 2021, after MBS announced the project on January 11, 2021. The actual construction commenced in September 2022 because it had to start after the completion of the test pile. Two contracts were signed in order to create an advanced transport structure: with American Aecom and Bechtel. Parsons Corporation has been selected as the new delivery partner for the Line City in NEOM in February 2023.

A major environmental apprehension associated with the Line project pertains to its repercussions on indigenous wildlife and ecosystems. This initiative entails building a city sprawling across approximately 2,600 square miles, which currently serves as the habitat for diverse plant and animal species, including some that are vulnerable or at risk.<sup>99</sup> The city's construction, coupled with the surge in population and development, affects the life of local species and their natural habitats.

The design visuals for The Line feature vibrant communal areas and a verdant rooftop garden brimming with plants, creating aesthetically pleasing spaces aimed at connecting residents with nature. However, these plants could potentially pose a threat to the local environment. The leafy species depicted in the images are not indigenous to Saudi Arabia. Artificial ecosystems not only pose the risk of introducing non-native plant or animal species into the local environment but also make themselves susceptible to invasive species. In Insects

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<sup>&</sup>lt;sup>98</sup> Joe. "Why Saudi Arabia's 'the Line' Is Not a Revolution in Urban Living." Global Construction Review, June 23, 2023.

 $<sup>\</sup>underline{https://www.globalconstructionreview.com/why-saudi-arabias-the-line-is-not-a-revolution-in-urban-living/.}$ 

<sup>&</sup>lt;sup>99</sup> Hignett, Katherine. "Saudi Arabia's Vertical Megacity Would Be an 'Ecological Disaster." Metro, July 29, 2022.

https://metro.co.uk/2022/07/29/saudi-arabias-vertical-megacity-would-be-an-ecological-disast er-17079108/.

<sup>&</sup>lt;sup>100</sup> Joe. "Why Saudi Arabia's 'the Line' Is Not a Revolution in Urban Living." Global Construction Review, June 23, 2023.

https://www.globalconstructionreview.com/why-saudi-arabias-the-line-is-not-a-revolution-in-urban-living/.

<sup>&</sup>lt;sup>101</sup> Ahdad, Doriane. "Greenwashing or Revolution, What Is NEOM All About?" SKEMA ThinkForward, April 21, 2023. <a href="https://knowledge.skema.edu/saudi-arabia-what-is-neom-project/">https://knowledge.skema.edu/saudi-arabia-what-is-neom-project/</a>.

like ants and mosquitos, which can hitch a ride on imported plants, may bring potential health risks to humans.

Oxagon was launched in November 2021. In December 2021, Thyssenkrupp Uhde Chlorine Engineers and Air Products entered into a contract to build a colossal electrolysis plant with a capacity exceeding 2 gigawatts in the Oxagon complex. This plant is planned to be a vital component of the planned green hydrogen production facility, which is estimated to be worth \$5 billion. In March 2022, Enowa established the Hydrogen and Innovation Centre (HIDC), which is being touted as Saudi Arabia's inaugural centre for hydrogen and innovation. This cutting-edge facility is expected to be one of the early occupants of Oxagon. In May 2023, Oxagon announced the opening of the Port of NEOM, formerly known as Duba Port, marking its readiness to facilitate business operations. Oxagon will reduce the amount of land used for industrial purposes and instead pioneer sustainable manufacturing facilities in climate change-affected coastal regions.

Trojena was presented to the public in 2022 and is scheduled to be completed by 2026. It is planned to be a place where "nature and technologies come together". Trojena embodies the core values and ambitious vision of NEOM, seamlessly blending nature and cutting-edge technologies to create a truly unparalleled global experience. This groundbreaking project stands as a significant stride towards realising NEOM's far-reaching aspirations, driven by a steadfast commitment to sustainability and the strategic application of advanced technology and interdisciplinary engineering.

The planned Trojena resort in Saudi Arabia's northwest will allegedly run on "sustainable infrastructure" and renewable energy, according to Saudi authorities. However, Greenpeace has claimed it is a "dangerous" ski resort being built in Saudi Arabia. The organization insists such a massive construction will significantly change the ecosystem and it can lead to unpredicted consequences. Greenpeace's concerns may be related to environmental and sustainability issues associated with constructing a ski resort in a region with a hot climate and limited water resources. Ski resorts can have significant environmental impacts, including habitat destruction, water usage, and increased greenhouse gas emissions from energy consumption for snowmaking and infrastructure.

NEOM represents a new era of change in Saudi Arabia. First of all, It leads the Kingdom to economic diversification as it eliminates oil revenue reliance. Additionally, it creates new job opportunities. According to some analysis, it is estimated to create 380 thousand jobs for Saudi nationals.<sup>103</sup> Nevertheless, it also

<sup>&</sup>lt;sup>102</sup> Construction Review Online. "Saudi Arabia: Neom City Project Timeline and All You Need to Know," November 9, 2021.

https://constructionreviewonline.com/biggest-projects/neom-city-project-timeline/. 
<sup>103</sup> Grant Thornton Saudi Arabia. Home. "NEOM and Its Impact on the Future of KSA," n.d. 
https://www.grantthornton.sa/en/insights/articles-and-publications/neom\_in\_KSA/.

has some downsides. People who live in the area of the NEOM have been forcibly displaced without any compensation.<sup>104</sup> One man from the displaced tribe was killed and 3 others received death sentences.

Despite all the controversy surrounding the NEOM project, MBS positioned himself as a visionary of the project. That is why he personally received a lot of criticism from non-governmental organisations such as Amnesty International due to the displacement of local communities and the environmental impact of such a massive development.<sup>105</sup> Even though it was achieved with a great cost, it gave him excessive attention and attracted foreign investors to the Kingdom. Finally, MBS faced a lot of international scepticism as the project seemed "unrealistic".<sup>106</sup> There are still questions about its funding and construction transparency.

The design of the NEOM Project would disrupt the pathway of bird migration in the area. Similar to any extended obstruction, such as a railway track, a fence, or a wall, of this magnitude, will disrupt the natural movements of animals in the desert by obstructing their usual routes. This has serious consequences for the ecosystem. There are also concerns about the use of resources in the city. Neom is being touted as a zero-emission city, but questions remain about how this will be achieved, particularly since the city is being built in an area with limited resources.

Up to now, the sole actions undertaken in the desert of the NEOM Project have involved issuing death sentences to those who resist vacating the area for the construction of NEOM. None of the three ambitious smart city projects have been successfully realised thus far. The Kingdom of Saudi Arabia currently finds itself in a state of inertia, caught between the planning stage and taking concrete actions. There is likely a temptation to delay its transition away from oil for as long as feasible.

#### Middle East and Saudi Green Initiative

For decades, rapid urbanisation across the Kingdom and the lack of sustainable development on the ground led to polluted air, soaring temperatures, severe dust storms, and other harmful byproducts. Things started to change with the rapid

<sup>&</sup>lt;sup>104</sup> OHCHR. "Saudi Arabia: UN Experts Alarmed by Imminent Executions Linked to NEOM Project," n.d.

https://www.ohchr.org/en/press-releases/2023/05/saudi-arabia-un-experts-alarmed-imminent-executions-linked-neom-project.

<sup>&</sup>lt;sup>105</sup> Amnesty International. "Saudi Arabia: Mass Demolitions and Forced Evictions Marred by Violations and Discrimination," June 22, 2022.

 $<sup>\</sup>underline{https://www.amnesty.org/en/latest/news/2022/06/saudi-arabia-mass-demolitions-and-forced-evictions-marred-by-violations-and-discrimination/.}$ 

<sup>&</sup>lt;sup>106</sup> "Is Saudi Arabia's 'the Line' NEOM Project Too Ambitious?" https://www.newarab.com/, August 18, 2022. https://www.newarab.com/analysis/saudi-arabias-line-neom-project-too-ambitious.

implementation of the Middle East Green Initiative and Saudi Green Initiative (MEGI and SGI). Since their launch in 2021, more than 77 policies have been introduced in order to promote energy transition and environmental protection.

Saudi Arabia and MBS himself proudly launched the Middle East Green Initiative in October 2021. In November 2022, at COP27, MBS announced to spend \$2.5 billion over the coming 10 years to support regional initiatives for the green energy sector. Thus, MBS put himself in the position, where he bears the personal responsibility for the project as it is not just a national, but regional initiative.

Since the launch of the MEGI in 2021, more countries such as Iraq, Israel, Jordan, Lebanon and Oman decided to join the initiative as they get more and more serious about combating global warming. This project will also help Saudi Arabia, as a part of the Five Arab States - Bahrain, Kuwait, Oman, and the UAE, achieve carbon neutrality and reduce carbon emissions by 10% globally and by 60% regionally which was their plan for 2050.

The first target and plan for SGI was to start planting more trees across the country. Since the Initiative was launched in 2021, only 18 million out 10bn trees have been planted (less than 1%). This is a very low dynamic as if it continues with the same speed in the future, Saudi Arabia will need more than 100 years to finish the tree planting project. Secondly, Of the 40 million hectares of degraded land it aims to rehabilitate, 60,000 hectares have been restored, which is also a minimum result.

In October 2021, the world's largest oil producer Saudi Aramco announced its plans to raise crude production from 12 million barrels a day to 13 million barrels by 2027. This goes against the government's claims to reduce oil production and interferes with Saudi's goal to achieve carbon neutrality by 2060. Saudi Arabia has defended its actions of lowering its carbon emissions while simultaneously extracting and globally distributing oil as part of its strategy to establish a "circular carbon economy." Critics of Saudi Arabia's environmental initiatives argue that an economy reliant on the extraction and burning of fossil fuels cannot genuinely achieve circularity given the existing technological constraints.

Still, the main goals of the Initiatives are yet to be achieved. As for today, there is a first target for the year 2030 to plant +600 million trees, protect 30 per cent of land and sea and cut CO2 emissions by 278 million tons per annum. The target for the year 2060 is to achieve net-zero carbon emissions.

https://www.reuters.com/business/sustainable-business/saudi-arabia-commits-25-bln-middle-east-green-initiative-crown-prince-2022-11-07/.

<sup>&</sup>lt;sup>107</sup> Reuters. "Saudi Arabia Commits \$2.5 Bln to Middle East Green Initiative - Crown Prince." *Reuters*, November 7, 2022, sec. Sustainable Business.

More specifically, SGI aims to stop and reverse desertification and soil degradation while preserving the kingdom's biodiversity and protecting the region's decreasing water reserves.

# Hydrogen

The project construction is set to be initiated by 2026 at the latest. 108 There are a few visible implementations of the NEOM Green Hydrogen Complex (mega hydrogen plant). First, an equal production joint venture of ACWA Power, Air Products and NEOM was introduced in August 2021.<sup>109</sup> In March 2022, Enowa established the Hydrogen and Innovation Centre (HIDC), which is being touted as Saudi Arabia's inaugural centre for hydrogen and innovation. In December 2022, the crucial engineering, construction and procurement contract was signed between venture partners and Indian Lasern & Toubro. This contract signing was called an "important milestone" as it heavily contributes to project advancement for it to be completed by 2026. The kingdom has stated that it intends to develop over 58 GW (gigawatts) of primarily solar power by 2030 and about 27 GW by 2023. Probably the most significant step in order to position themselves as global leaders in the production of hydrogen and blue hydrogen was done by the Kingdom in September 2020. That month, Saudi's state oil company shipped 40 tons of blue ammonia (a form of blue hydrogen) to Japan. That was the first supply chain of blue ammonia in the world at that time.

It is a significant milestone in the development and adoption of blue hydrogen as a potential energy carrier and low-carbon alternative to traditional fossil fuels. By using blue ammonia, Japan can potentially reduce its carbon footprint in sectors like power generation, transportation, and industrial processes thanks to Saudi Arabia. However, despite being a cleaner option compared to traditional fossil fuels, blue ammonia production still involves natural gas extraction and carbon emissions. Some environmentalists argue that the focus should be on promoting renewable energy sources like green hydrogen, which is produced using renewable electricity.

Hydrogen has the potential to play a crucial role in the global energy transition towards cleaner and more sustainable energy sources. Green hydrogen production is possible from renewable energy sources. By investing in hydrogen technologies and infrastructure, Saudi Arabia positioned itself as a key player in the emerging hydrogen economy, attracting investments and stimulating the growth of associated industries. Hydrogen energy opens the door to cooperation

<sup>&</sup>lt;sup>108</sup> Habibic, Ajsa. "NEOM Green Hydrogen Project Wraps up 2022 with 'Important Milestone.'" Offshore Energy, December 28, 2022.

https://www.offshore-energy.biz/neom-green-hydrogen-project-wraps-up-2022-with-important-milestone/.

www.airproducts.com. "NEOM Green Hydrogen Complex | Air Products," n.d. https://www.airproducts.com/campaigns/neom-green-hydrogen-complex.

between China and Saudi Arabia. What is more, Saudi Arabia is a global energy power and a key fulcrum country of the Belt and Road Initiative and has a good foundation for energy cooperation with China. On December 8, 2022, China and Saudi Arabia entered into a significant agreement in the presence of their respective leaders. This agreement consisted of an intergovernmental agreement and a memorandum of understanding focusing on collaboration in various areas, including hydrogen energy. This memorandum of understanding is a part of the comprehensive strategic partnership agreement. It is also an alignment plan between Saudi Arabia's Vision 2030 and China's Belt and Road Initiative.

The hydrogen initiative is directly connected with carbon reduction. Domestically, the higher the consumption of clean hydrogen in the transportation sector, for example, the lower the country's carbon footprint. Since the first hydrogen fueling station was built in 2019, Toyota Motor's Mirai sedan-style FCEVs (fuel cell electric vehicles) have been put through their paces at Air Products Technology Center in the Dhahran Techno Valley Science Park, and Saudi Arabia has determined that they are "suitable for the kingdom." Eventually, Saudi engagement in hydrogen-related agreements and investment in research and development of hydrogen production could increase its international standing and global importance.

The plan is indeed ambitious, but the objectives are still far from realisation. The hydrogen market is currently in its infancy, and securing the necessary investments for the national hydrocarbon company, Aramco, to commence exports by 2030 is proving to be a formidable challenge.

# Conclusion

In recent years, the Crown Prince of Saudi Arabia has taken some steps to address climate change in his country. The initiatives he put in place include a series of actions to diversify Saudi Arabia's economy from oil as well as investment in renewable energy sources. Saudi Arabia is one of the largest oil producers in the world. For decades, the country exclusively relied on oil. However, after the oil price crisis that occurred between 2014 and 2016, MbS completely understood that such reliance is dangerous for a country's economic future. The al-Saud family's control over the country is based on oil revenues. Since oil dependence becomes more and more dangerous and unreliable, the development of new sectors of the economy also brings instability and uncertainty for the ruling family. It also shatters Saudi's long-term social contract -

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<sup>&</sup>lt;sup>110</sup> Writer, Staff, and Zawya Projects. "Saudi Arabia Top Destination for Belt and Road Energy Engagements in 2022 - Report." www.zawya.com. Accessed July 6, 2023.

https://www.zawya.com/en/projects/bri/saudi-arabia-top-destination-for-belt-and-road-energy-engagements-in-2022-report-hwcbrr83.

<sup>&</sup>lt;sup>111</sup> ISPI. "Saudi Arabia's Oil Dependence: Challenges Ahead | ISPI." n.d. https://www.ispionline.it/en/publication/saudi-arabias-oil-dependence-challenges-ahead-14997.

"no taxation, no representation". What is more, economic stability is crucial for Saudi Arabia to maintain the role of the regional hegemon.

That was the turning point when the country's leadership started thinking about future policies that would strengthen the Kingdom's economy. Although MbS knew it was important to promote some positive changes in the Kingdom in terms of climate actions, he faced several environmental challenges such as rising temperatures and consequent desertification, air pollution, water scarcity and water resources management and rapid urbanisation rates. Those challenges have to be resolved in order to successfully implement environmental policies. Most of the environmental issues were caused by the country's geographical location and the rapid urbanisation rate of its population. Those challenges include rising temperatures and consequent desertification.

One of the most important milestones in MbS 'career was the announcement of the Vision 2030 plan in 2016. The plan aims at unlocking the potential of non-oil sectors as well, further integration of Saudi's economy regionally and globally and maximising exports while being environmentally sustainable. It also strives to promote social and cultural reforms. The project has various concrete objectives, the most important ones being the expansion of the Public Investment Fund (PIF), enhancing educational programs for Saudi workers, improving the overall quality of life for Saudi citizens and the development of the vibrant entertainment sector.

To conclude, MBS wants to go green to develop different sectors of the economy and not only gain revenue from oil. The Crown Prince has taken several actions to address climate change and promote sustainability. Those actions include the Saudi Arabia Green Initiative and Middle East Green Initiative which will allow the Kingdom to reduce carbon emission and increase the use of renewable energy. The NEOM Project plan is developed to build the first sustainable city in the Kingdom that can potentially become a model for large-scale urban development and future cities. It is also expected to generate numerous job opportunities for Saudis. Lastly, the building of a hydrogen plant is the most revolutionary step in the process of energy source diversification as hydrogen, particularly when produced through renewable energy sources, can serve as a clean and sustainable energy carrier.

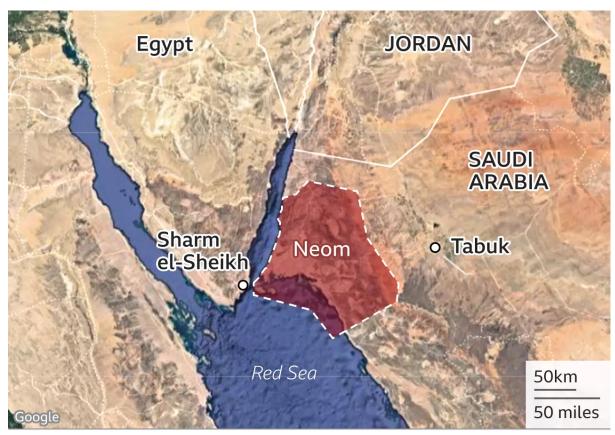
Therefore, Mohammed bin Salman is a climate leader, even though his objective to develop climate change policies in the Kingdom is largely based on his desire to cut oil dependence without losing high revenues. Even though Saudi Arabia and MBS personally steer a good course with renewable energy and hydrogen projects, most of the initiatives are sadly stuck in the early development stages and in need of actual implementation.

When analysing MBS's motivation to introduce several green initiatives and Vision 2030 itself, it is vital to understand that his ultimate goal is to stay in power and

hold the position of the regional hegemon. With a high probability, little to no green initiatives would have been introduced in authoritarian Saudi Arabia if the country had not experienced the oil price crisis in 2014-2016.

Ultimately, whether one views Mohammed bin Salman as a climate leader or not may depend on their assessment of the sincerity and effectiveness of Saudi Arabia's environmental efforts in the context of its continued reliance on fossil fuels.

# Annex:

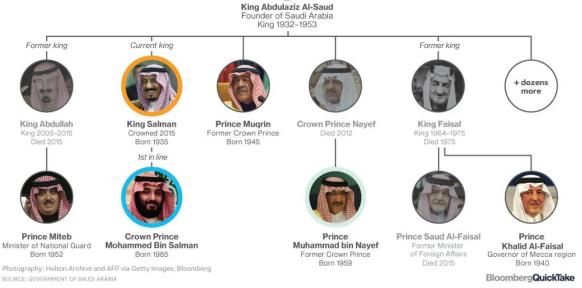


Thomas, Merlyn, and Vibeke Venema. "Neom: What's the Green Truth behind a Planned Eco-City in the Saudi Desert?" *BBC News*, February 22, 2022, sec. BBC Trending. <a href="https://www.bbc.com/news/blogs-trending-59601335">https://www.bbc.com/news/blogs-trending-59601335</a>.

# Saudi Arabia's Succession

Standouts in the family tree





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