

QUASAR INSIGHTS

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SAUDI GREEN INITIATIVE & SCIENCE DIPLOMACY:

HOW SAUDI ARABIA'S NEW INITIATIVE IS A GAME CHANGER FOR CLIMATE CHANGE & PEACEBUILDING

BY ROBERT LOFTUR-THUN

Quasar International Institute applauds the vision and leadership of Saudi Arabia in announcing the ambitious Saudi Green Initiative and Middle East Green initiative, which was launched March 28, 2021.

"We reject the false choice between preserving the economy and protecting the environment. Climate action will enhance competitiveness, spark innovation, and create millions of high-quality jobs," said the Crown Prince.

Our planet is at a crossroad. CO2 emissions from hydrocarbons need to be reduced 55% by 2030 if the planet is not to exceed a further 1.5 degrees centigrade warming and avoid disastrous consequences. Leadership and Science Diplomacy are critical to setting and meeting ambitious goals to combat this threat. This leadership and Science Diplomacy is exemplified by His Royal Highness Prince Mohammed bin Salman bin Abdulaziz's announcement, upon the directive of the Custodian of the Two Holy Mosques, King Salman bin Abdulaziz Al Saud.

AMBITIOUS GREEN INITIATIVE TARGETS FOR SAUDI ARABIA

In announcing the Saudi Green Initiative, His Royal Highness Prince Mohammed bin Salman bin Abdulaziz stated, "We will work through The Saudi Green Initiative to raise vegetation cover, reduce carbon emissions, combat pollution & land degradation, and preserve marine life." This initiative includes:

- Planting 10 billion trees in KSA by 2030, resulting in a 12-fold increase in tree cover and rehabilitation of roughly 40 million hectares of degraded lands.
- Contributing more than 1% towards the global goal of planting 1 trillion trees.
- Reducing carbon emissions by more than 4% of global contributions, through an ambitious renewable energy program that will generate 50% of the Kingdom's energy from renewables by 2030.
- Increasing protected areas to more than 30% of the Kingdom's land area, representing 600,000 square kilometers
- Several other projects in the fields of clean hydrocarbon technologies, estimated to eliminate more than 130 Million metric tons of carbon emissions.



Planting trees in Saudi Arabia.



EXECUTIVE DIRECTOR'S MESSAGE

DR. ZEYAD ALSHAMMARI

Quasar International Institute is a nonpartisan educational nonprofit organization dedicated to promoting peace, prosperity, and a sustainable future for us all. Our goal is to fight hate, build peace, and foster people-to-people exchanges and relationships.

"PRESIDENT BIDEN SHOULD PARTNER WITH SAUDI ARABIA AND THE MIDDLE EAST ON THESE GREEN INITIATIVES AS A SCIENCE DIPLOMACY EFFORT."

I invite you to join me in achieving these goals and fulfilling Quasar's mission. We welcome diverse views and we hope to hear from you.

SCIENCE DIPLOMACY: A SAUDI MIDDLE EAST GREEN INITIATIVE

<u>"Want to ease tensions in the Middle East? Science diplomacy can help." – David P. Hajjar June 27, 2016</u> (click to read)

HRH Crown Prince Mohammed bin Salman announced the Middle East Green Initiative in coordination with neighboring countries of the Gulf Cooperation Council (GCC) states and Middle Eastern countries.

Goals include:

- Planting 40 billion trees in Middle East countries in addition to the 10 billion trees in Saudi Arabia, for a total of 50 billion trees, which represents 5% of the global target of planting 1 trillion trees
- Restoring an area equivalent to 200 million hectares of degraded land, reducing 2.5% of global carbon levels.
- Working with regional partners to share the Kingdom's experiences and transfer the Kingdom's knowledge to reduce carbon emissions resulting from hydrocarbon production in the region by more than 60%.

These joint efforts and various other initiatives will result in a 10% contribution towards global reduction in carbon emissions.





HRH Crown Prince Mohammed bin Salman

THE CROWN PRINCE & SCIENCE DIPLOMACY Reaching out to MENA leaders

Saudi HRH Crown Prince Mohammed bin Salman announced he immediately reached out to leaders in the Middle East from UAE, Kuwait, Bahrain, Qatar, Jordan, Pakistan, Eritrea, Sudan, and Iraq to collaborate and coordinate this initiative that will commence in the second quarter of 2021.

This initiative is an outstanding example of how Science Diplomacy can help solve critically important real world problems, and can promote peace, prosperity, and sustainable futures.

The Kingdom's Middle East Green Initiative can not only contribute towards solving global environmental issues; it can also help promote international cooperation, bring together governments and people, prevent brain drain, and help solve on-the-ground, quality of life issues for citizens. As Adhwan Alhamari points out in his April 1st article in the Independent (click to read), currently the Middle East loses around \$13 bn every year to sand and dust storms, and storms reduce the life expectancy of its population by one year and a half.

KSA'S GREEN INITIATIVE: A FIT WITH BIDEN'S NEW SCIENCE PRIORITIES?

Hours after he was sworn in, President Joe Biden announced the United States would be rejoining the Paris Climate Accord. Biden has outlined five priorities for science in his administration, including three priorities that offer substantive potential for Science Diplomacy efforts with Saudi Arabia and the Middle East:

- addressing public health needs;
- confronting the climate crisis;
- and building trust in science and technology.

Secretary of State Anthony Blinken, in his first speech laying out the Biden Administration US foreign policy, stated that a key point of US foreign policy is "We will tackle the climate crisis and drive a green energy revolution... We can't do this alone... This is the definition of a problem we need to work on together, as a community of nations, to solve. And we can't settle for only doing the bare minimum. We have to challenge ourselves and each other to do more."

Clearly the Biden administration sees that collaboration with other nations around the world is the only path to addressing climate change. Saudi Arabia's new Green Initiative and Middle East Green Initiative offer the Biden administration a clear path for this collaboration.



President Biden explains his new science priorities

"WE CAN'T DO THIS ALONE...THIS IS THE DEFINITION OF A PROBLEM WE NEED TO WORK ON TOGETHER, AS A COMMUNITY OF NATIONS, TO SOLVE."

ANTHONY BLINKEN
US SECRETARY OF STATE

KSA'S GREEN INITIATIVES, VISION2030, & STEM

Saudi Arabia, the MENA region, and the U.S. not only share the common challenge of addressing the COVID-19 pandemic and the threat of climate change.

All these nations also face the challenge of rapidly advancing technologies that will disrupt jobs and livelihoods. Oxford Economics estimates that 20 million jobs will be lost to robots worldwide by 2030. A recent Forrester report, "Future of Work," estimates job losses of 29% by 2030 with only 13% job creation to compensate. So how to avoid disastrous impacts on countries that already have unemployment and underemployment problems, particularly for youth?

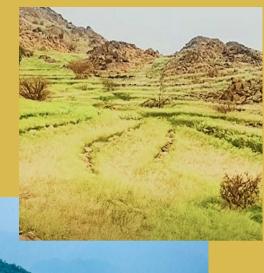
KSA's new Green initiatives not only are in sync with its Vision2030, but can leverage a wide breadth of cross-sector opportunities for workforce development. From regenerative agriculture and forestry management to Artificial Intelligence, CubeSat technology, and hydrogen power, opportunities could abound for explosive job growth. Well-designed STEM curriculums, international people-to-people exchanges, experiential learning, and STEM leadership development will become critical for countries aiming to develop their educational and workforce capacity to be competitive in the 21st century.



SAUDI GREEN INITIATIVES BUILD ON PAST SUCCESSES

Over the years, and as part of its Vision 2030 initiative, Saudi Arabia has been laying the groundwork for the Saudi Green Initiative and the Middle East Green Initiative:

- Since 2000, the Khaled bin Sultan Living Oceans Foundation has worked with dedicated ocean conservation partners around the world for its Science Without Borders program.
- The Al Baydha Project in rural western Saudi Arabia, founded in 2009 by Her Royal Highness Princess Haifa Al Faisal, Harvard University bioethicist and futurist Mona Hamdy, and Stanford University permaculturist Neal Spackman, is a multi-year, innovative land restoration, poverty-alleviation, and heritage preservation pilot program whose main objective is to create financial and social independence for the inhabitants by training, educating and employing them in rainwater soil absorption infrastructure, reforestation, agroforestry and grazing, as well as community capacity building. The project captures rainwater that used to run into the Red Sea during flash floods to recreate a vibrant savannah from the desertification that had occurred. This project could be replicated and scaled up, transforming the Kingdom's landscape.





Al Baydha Project created a savannah in the desert, and Jazan green terrace in Saudi Arabia on Red Sea.

Red Sea coral reefs off the coast of Saudi Arabia and conservation efforts to bring back the Oryx to Arabia.

- Saudi Arabia has been conducting research on higher efficiency solar power for clean hydrogen production and working with partners to develop a global green hydrogen supply chain, as well as hosting the 2020 Hydrogen Middle East Symposium. The Kingdom recently announced a \$5 billion hydrogen production facility near NEOM. Saudi Arabia's goal to be the world's largest clean hydrogen producer could be a global game changer in reducing carbon emissions from vehicles.
- In 2018, a framework agreement was signed between the Prince Albert II of Monaco Foundation and the Saudi Public Investment Fund's Red Sea Collection, laying the foundation for an exchange of expertise to help safeguard marine biodiversity, protect coral reefs and combat plastic pollution.
- The Kingdom has established the Environmental Special Forces in 2019 to enforce environmental laws, helping to increase the percentage of natural reserves 4% to more than 14%.

These initiatives offer innovative, promising strategies and collaborations to transform Saudi Arabia, and with the Kingdom's leadership, transform the Middle East. Archeological and historical evidence shows the Kingdom was once a more abundant, forested, and ecologically diverse ecosystem. The Kingdom can blend ancient wisdom and traditional strategies with cutting edge new technologies to transform the Middle East and combat climate change.

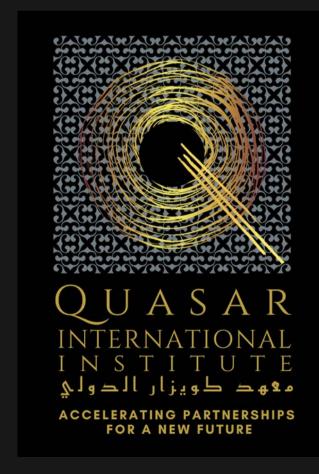
SAUDI ARABIA AS A MODEL FOR SCIENCE DIPLOMACY

Saudi Arabia's vision for how the Green Initiatives can bring together Government, Business, and Civil Society can be an international model for bringing leaders together both within countries and between nations to set and surpass new goals for combatting climate change.

The U.S. should strongly support the Saudi Green Initiative and Middle East Green Initiative, and the U.S. has a unique opportunity to partner with Saudi Arabia in bringing this vision and model to efforts around the world through Science Diplomacy.

Otherwise, the U.S. could miss a major opportunity to address climate change and promote peace.





OUR MISSION

We build international understanding, peace, and cooperation through people-to-people exchanges, experiential learning, leadership development, and travel focused on learning about and engaging in projects in key emerging sectors essential to our collective future.

Quasar is a nonpartisan educational nonprofit dedicated to building understanding and building bridges. Located in Washington, DC, Quasar focuses on developing cooperation, collaborations, and strategic partnerships. Quasar works to enhance U.S. awareness, knowledge, and understanding of Arab countries, the Middle East, and the Islamic world, and we enhance MENA awareness, knowledge, and understanding of the U.S.