

IRAN'S NUCLEAR ODYSSEY: COSTS AND RISKS

ALI VAEZ AND KARIM SADJADPOUR

Iran's half-century nuclear odyssey has been marked by enormous financial costs, unpredictable risks, and unclear motivations. The program's covert history, coupled with the Iranian government's prohibition of open media coverage of the nuclear issue, has prevented a much-needed internal debate about its cost-benefit rationale. Critical questions about the program's economic efficacy and safety have been left unanswered.

On the Ground: Costs and Risks

- The program's cost—measured in lost foreign investment and oil revenue—has been well over \$100 billion.
- The Bushehr nuclear reactor took nearly four decades to complete and cost almost \$11 billion (measured in today's dollars), making it one of the most expensive reactors in the world.
- Bushehr provides merely 2 percent of Iran's electricity needs, while 15 percent of the country's generated electricity is lost through old and ill-maintained transmission lines.
- Despite aspirations to be self-sufficient, Iran's relatively small uranium resources will inhibit the country from having an indigenous nuclear energy program.
- Iran is the only nuclear state that is not a signatory to the Convention on Nuclear Safety, and its nuclear materials and stockpiles are some of the least secure in the world.
- Most ominously, the Bushehr reactor sits at the intersection of three tectonic plates.

Policy Implications for the United States and Like-Minded Allies

Economic pressure or military force cannot "end" Iran's nuclear program. It is entangled with too much pride—however misguided—and sunk costs to simply be abandoned.

The nuclear issue will never be fully resolved absent a broader political settlement. The only sustainable solution for assuring that Iran's nuclear program remains purely peaceful is a mutually agreeable diplomatic solution. Given that political reconciliation is unlikely, the goal should be détente.

Alternative options exist and should be highlighted. For example, Iran's solar energy potential is estimated to be thirteen times higher than its total energy needs. By offering Iran cutting-edge alternative energy technologies, a positive precedent could be set for other nuclear-hopefuls.

Public diplomacy should complement nuclear diplomacy. Efforts should make clear to Iranians that a prosperous, integrated Iran—as opposed to a weakened and isolated Iran—is in America's interests. Washington should clarify what Iranians would collectively gain by a nuclear compromise (other than a reduction of sanctions and war threats) and explain how a more conciliatory Iranian approach would improve the country's economy and advance its technological—including peaceful nuclear—prowess.

ABOUT THE AUTHORS

Ali Vaez
Senior Iran Analyst
International Crisis Group

Karim Sadjadpour
Senior Associate
Carnegie Endowment

CONTACT

Scott Toussaint
Government Affairs Manager
+1 202 939 2307
stoussaint@ceip.org

Charita Law
Media Manager
(202) 939-2241
claw@ceip.org

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

The world's first truly global think tank with operations in Washington, Moscow, Beijing, Beirut, and Brussels.

© 2013 Carnegie Endowment for International Peace. All rights reserved.

The Carnegie Endowment does not take institutional positions on public policy issues; the views represented here are the author's own and do not necessarily reflect the views of the Endowment, its staff, or its trustees.

CarnegieEndowment.org

 @CarnegieEndow

 [facebook.com/CarnegieEndowment](https://www.facebook.com/CarnegieEndowment)