

# The Iran Nuclear Deal: Where we are and our options going forward

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# Outline

- The Deal
- Changing U.S. policy
- Strengthening the nonproliferation regime

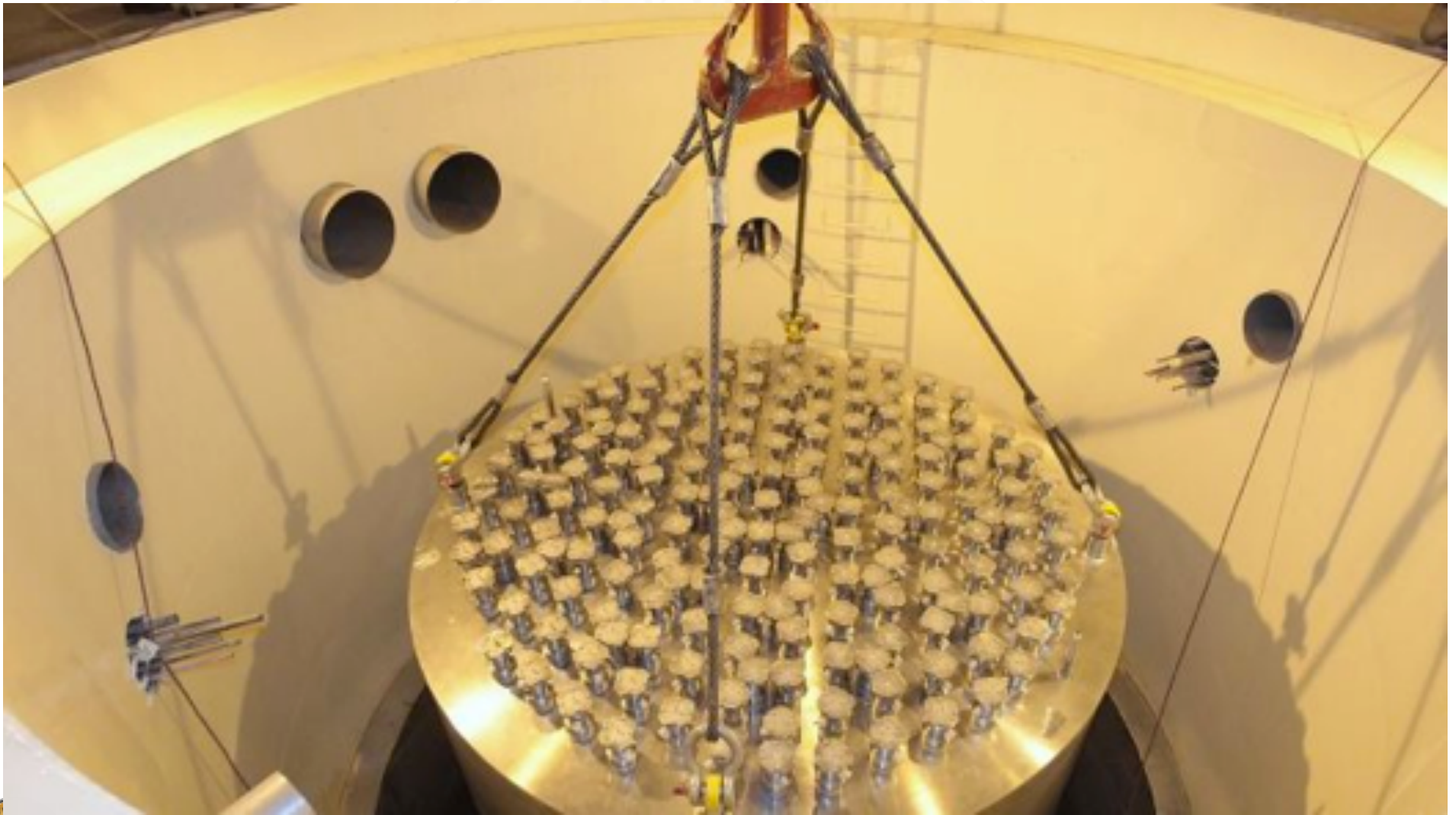


# Red lines

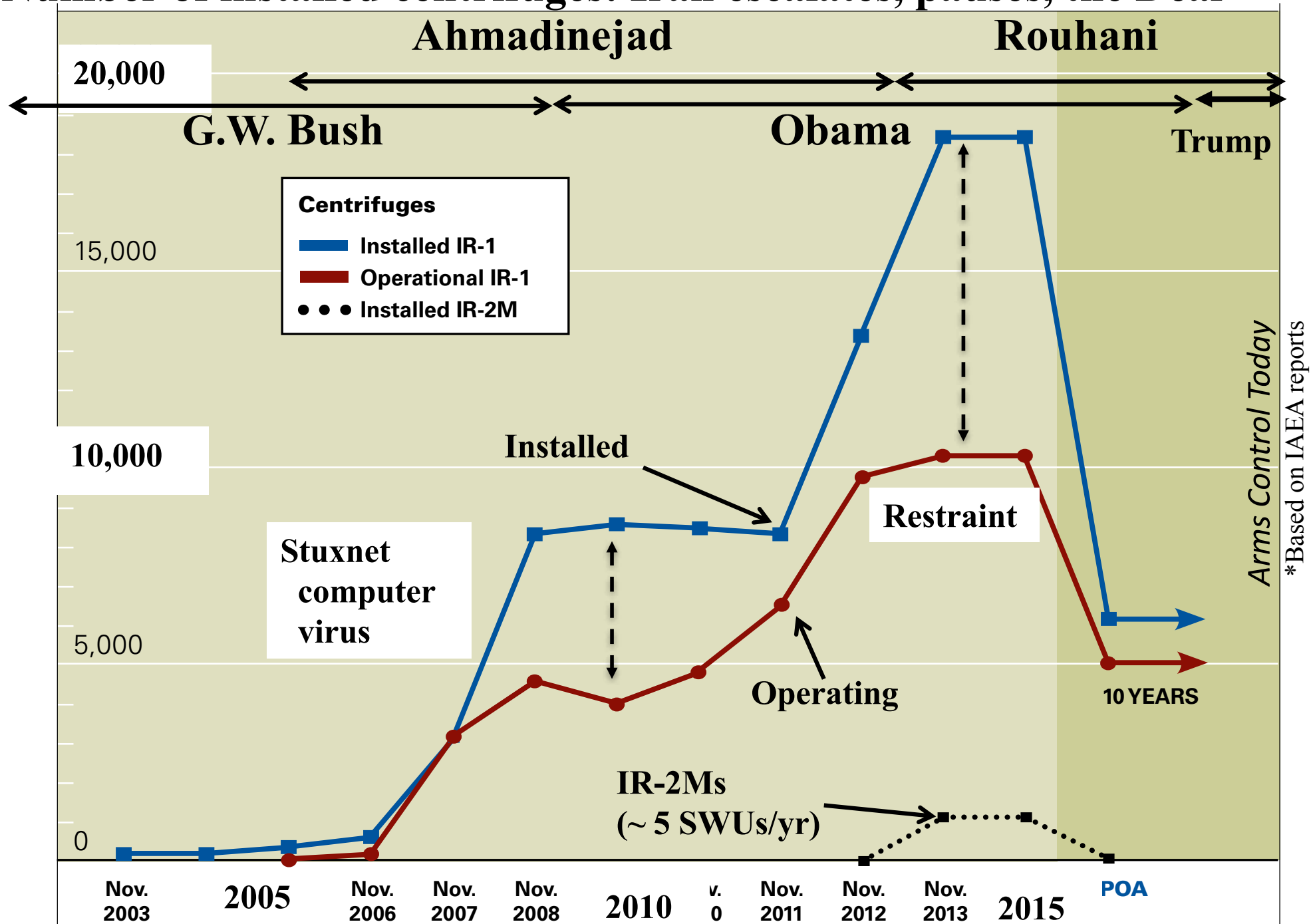
- Iran would not give up either its enrichment program or its Arak reactor.
- President Obama: Iran would have to be at least a year away from making enough highly enriched uranium or separating enough plutonium to make a bomb.



Arak reactor design: 40→20 MWt, natural U →LEU fuel,  
8→1 kg Pu/yr production  
spent fuel to be shipped to Russia



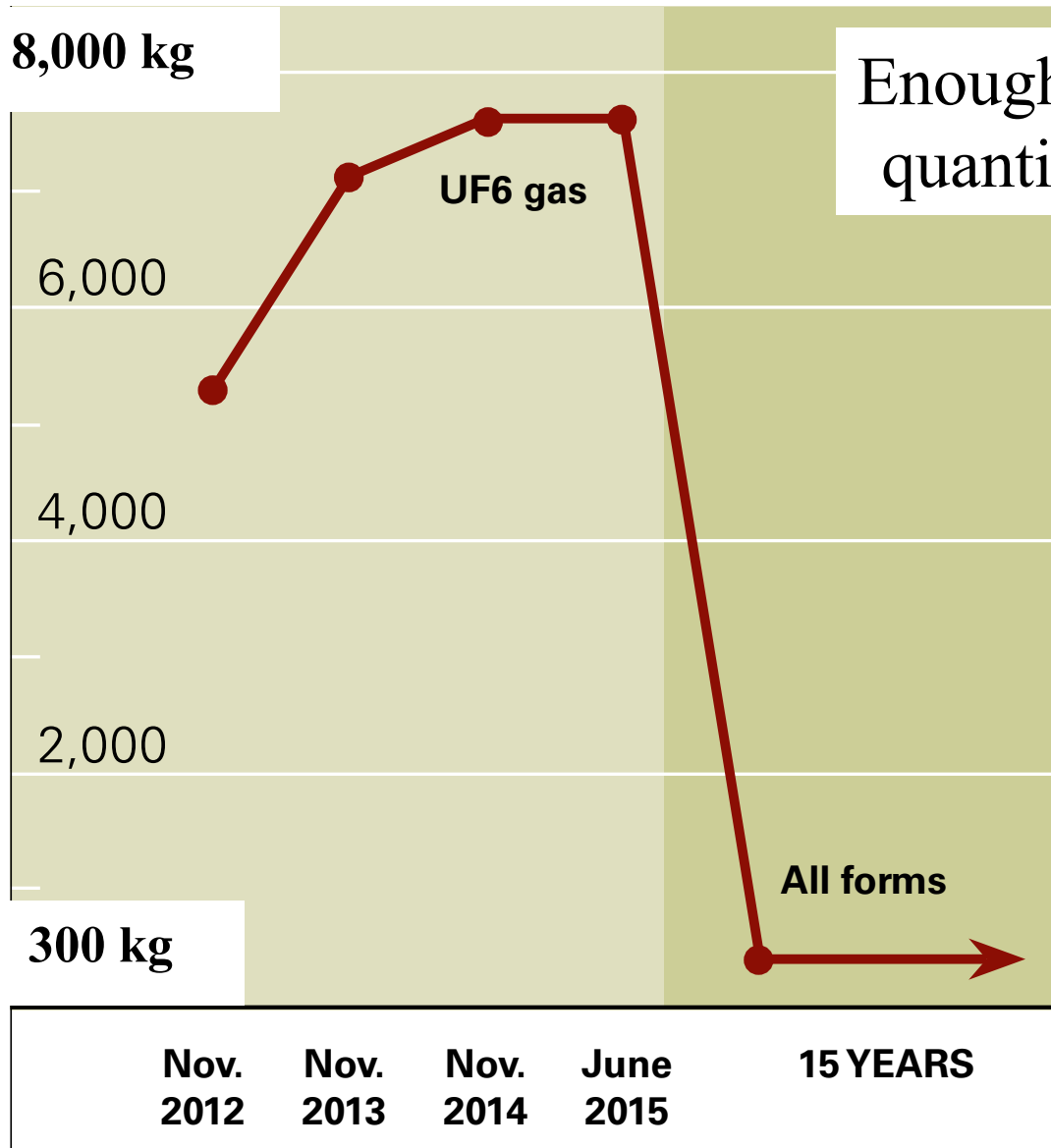
# Number of installed centrifuges: Iran escalates, pauses, the Deal\*



\*Based on IAEA reports



# Iran's stocks of LEU



Enough LEU feed to produce ~5 bomb quantities of 90% enriched uranium.

~ 1/5 of LEU feed to produce one bomb quantity of HEU.



# Verification

IAEA has issued 9 reports on Iran's compliance with the Deal at its declared nuclear sites during 2016-17 and has reported no significant violations.

***Focus of the critics, including US Ambassador to the UN, Nikki Haley, has been on the fact that the IAEA has not been inspecting military sites in Iran to verify that Iran is not:***

- Doing computer modeling of nuclear devices,
- Working on multi-point detonation of explosives and diagnostic equipment for such explosions, or
- Working on explosively-driven neutron generators.

***IAEA position is that such investigations require new and credible indications of banned nuclear activities. US does not claim to have such evidence.***



# Complaints about the Deal

- **Duration limited.** Between 2025-40, Iran reverts to normal status plus Additional Protocol, the maximum transparency required of a normal country.
- **Iran's ballistic missile program.** Sanctions but no limits agreed.
- **Iran's activities in the region:** Hamas (Gasa strip), Hezbollah (Lebanon), Houthis (Yemen)...
- **Israel, Saudi Arabia and perhaps U.S. would prefer regime change in Teheran** (we forget that the current regime was established in reaction to our regime change in 1953)





## In U.S., Iran Deal is an executive agreement (not a treaty) with Iran, China, European Union, France, Germany, Russia and the UK

According to , the Iran Agreement Review Act of 2015, if the President does not certify every 90 days that the suspension of U.S. nuclear sanctions is “appropriate and proportional...to the measures taken by Iran” and “vital to the national security interests of the United States” Congress can take the U.S. out of the Deal by a majority vote within 60 days. After that, action by the Senate will be subject to the filibuster rule (60% majority required).



# President Trump's position

On 13 October 2017, he declared that the suspension of U.S. nuclear-related sanctions was not “appropriated and proportionate” to the measures taken by Iran:

***“I am directing my administration to work closely with Congress and our allies to address the deal’s many serious flaws so that the Iranian regime can never threaten the world with nuclear weapons. These include the deal’s sunset clauses that, in just a few years, will eliminate key restrictions on Iran’s nuclear program...”***

***“in the event we are not able to reach a solution working with Congress and our allies, then the agreement will be terminated. It is under continuous review, and our participation can be cancelled by me, as President, at any time.”***



# The response of U.S. partners in the Deal

***"The Iranian nation has not and will never bow to any foreign pressure,"*** -- President of Iran

***"Preserving the [Iran nuclear deal] is in our shared national security interest."*** -- President of France, Chancellor of Germany, PM of UK,  
***reopening negotiations "is a nonstarter and trying to get it is a dead end."*** -- France's Ambassador

***"no regional issue that we have with Iran that would not be even more difficult to handle if Iran possessed nuclear weapons."*** –EU Amb.

***"We already have one potential nuclear crisis. We definitely do not need to go into a second one."*** – EU Foreign Minister

***"If it's not broke, don't fix it."*** – Russian Deputy Foreign Minister

***"this deal is important to ensuring the international nuclear nonproliferation regime and regional peace and stability"***– China FM



# Not just an Iran problem

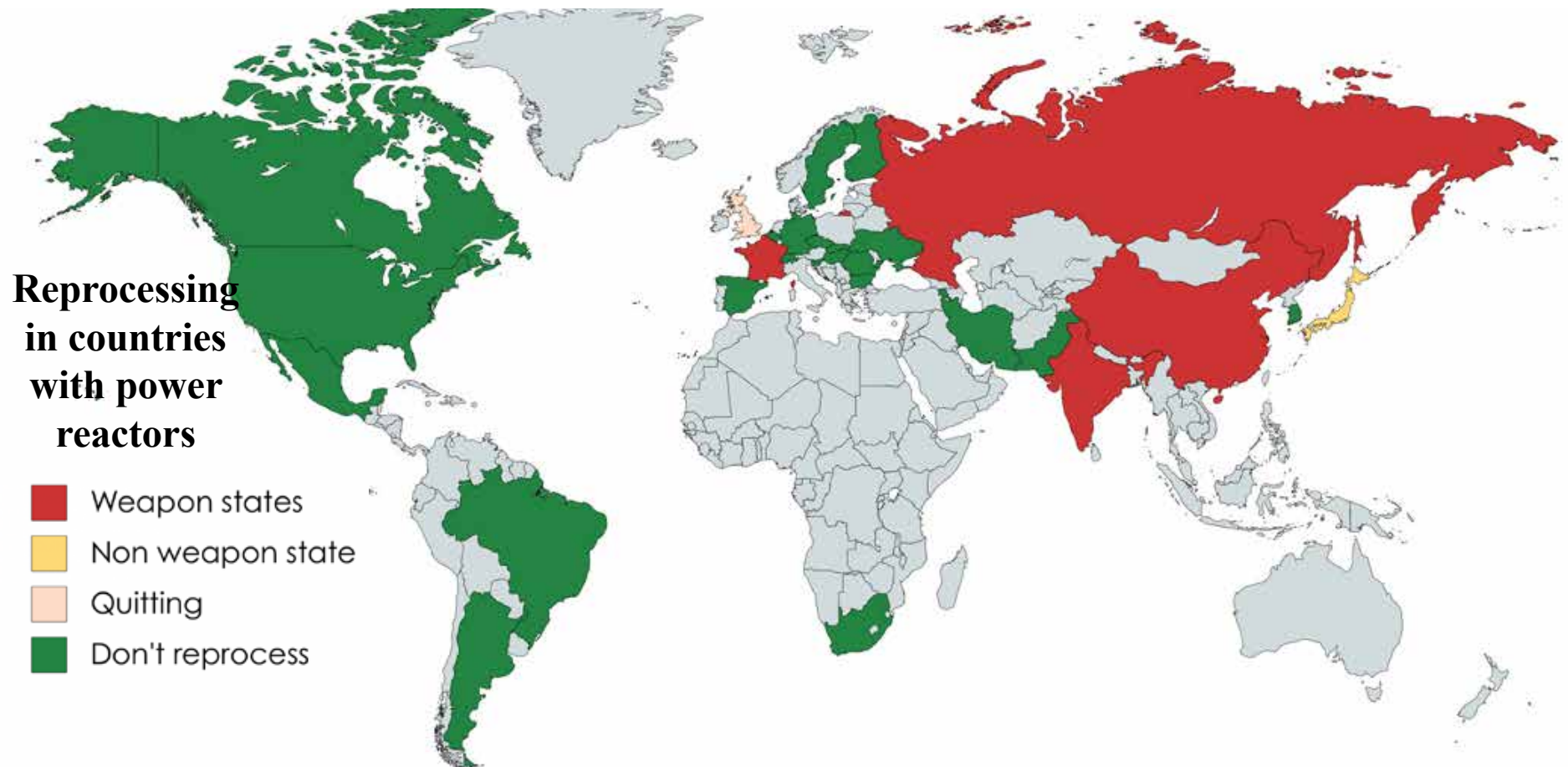
- Any national enrichment or reprocessing (plutonium-separation) program is a potential nuclear-weapon proliferation problem.
- We trust some countries (Germany, Netherlands, Japan) but not most others. [***Japan has enough separated Pu for 1000 nuclear weapons.***]
- We have had ***confrontations over Argentina, Brazil, India, Japan, Pakistan, South Africa, South Korean enrichment and/or reprocessing programs in 1970s. N. Korea starting in 1990s. Iran, S. Korea today.***
- ***For the U.S., the “gold standard” for a non-weapon state is for it to have no enrichment and no reprocessing capacity.*** So far, only the United Arab Emirates have committed –conditionally – to this standard.
- A generic solution is needed.



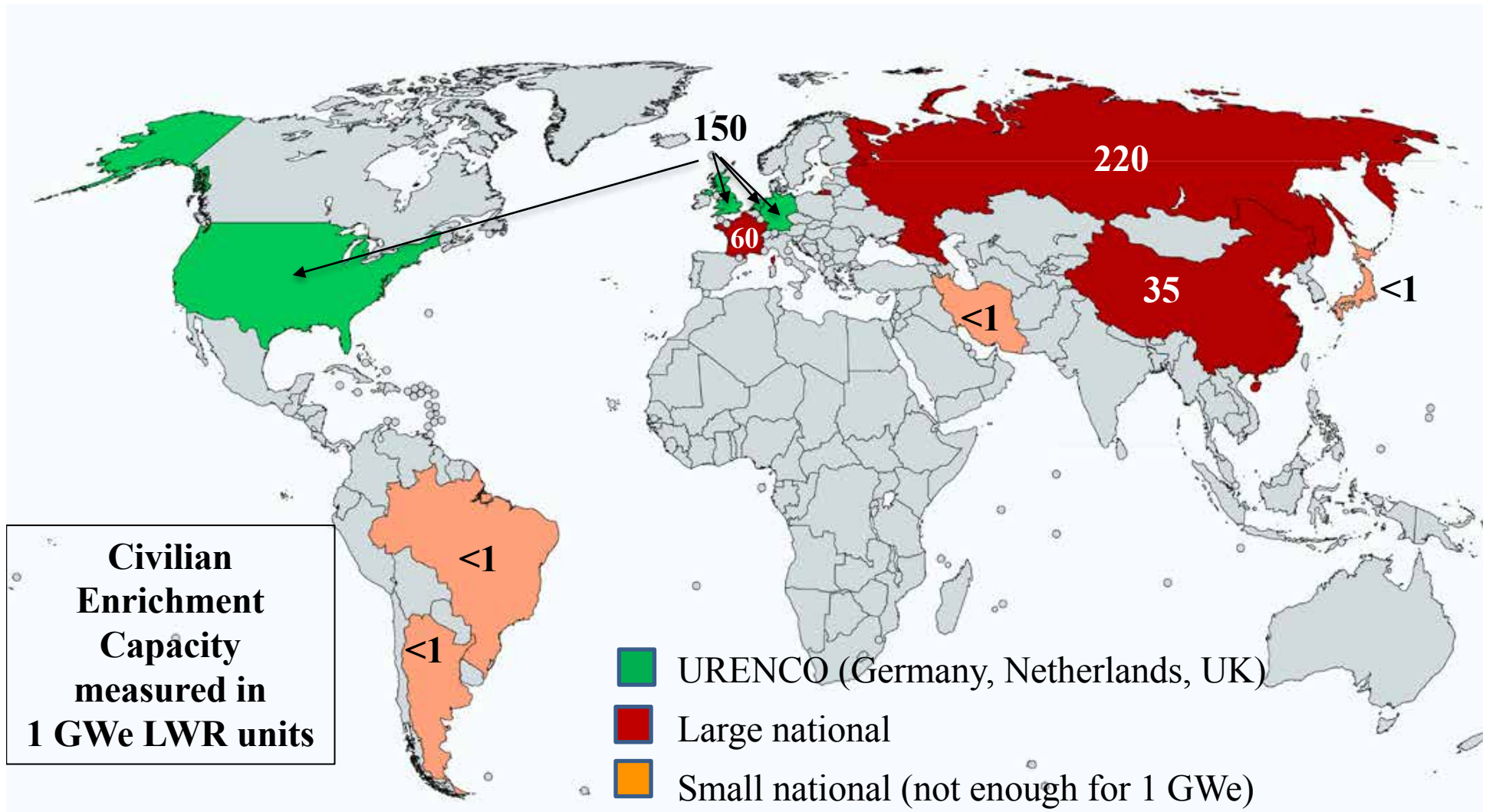
# Reprocessing not economic. Why not ban it?

U.S. has opposed spread of reprocessing since 1974, when India used Atoms-for-Peace reprocessing to obtain plutonium for weapons.

Fortunately, Iran is not interested in reprocessing.



# Multinationalize enrichment?



# Verification benefits of multi-nationalization

Urenco has focused only on assuring best practices are shared.

## **Initial thoughts on how to build in more multi-national transparency**

- Control-room/maintenance personnel of mixed nationalities.
- Personnel involved in centrifuge manufacture and installation from other countries with centrifuge-design expertise.
- Sensitivities about industrial intelligence on operations should be balanced with need (as in Iran) for international confidence that no undeclared material is being enriched.
- Regional verification organizations such as Euratom and ABACC also have confidence-building benefits.



# Linkage of nonproliferation to disarmament

Increasingly, however, key non-weapon states are demanding that the weapon-states move further on nuclear disarmament (CTBT, FMCT, de-alerting, no first use, deeper cuts...) before they will undertake further nonproliferation commitments

- **Argentina, Brazil** unwilling to sign up to Additional Protocol (AP).
- **Egypt** unwilling to ratify CWC, BWC until Israel does
- **Iran** unwilling to accept permanent restrictions beyond AP
- **South Africa** unwilling to eliminate its legacy stock of HEU from its dismantled nuclear weapons.
- **Treaty on Prohibition of Nuclear Weapons** voted for in July by 122 non-weapon states.

**We need political as well as technical advances.**

