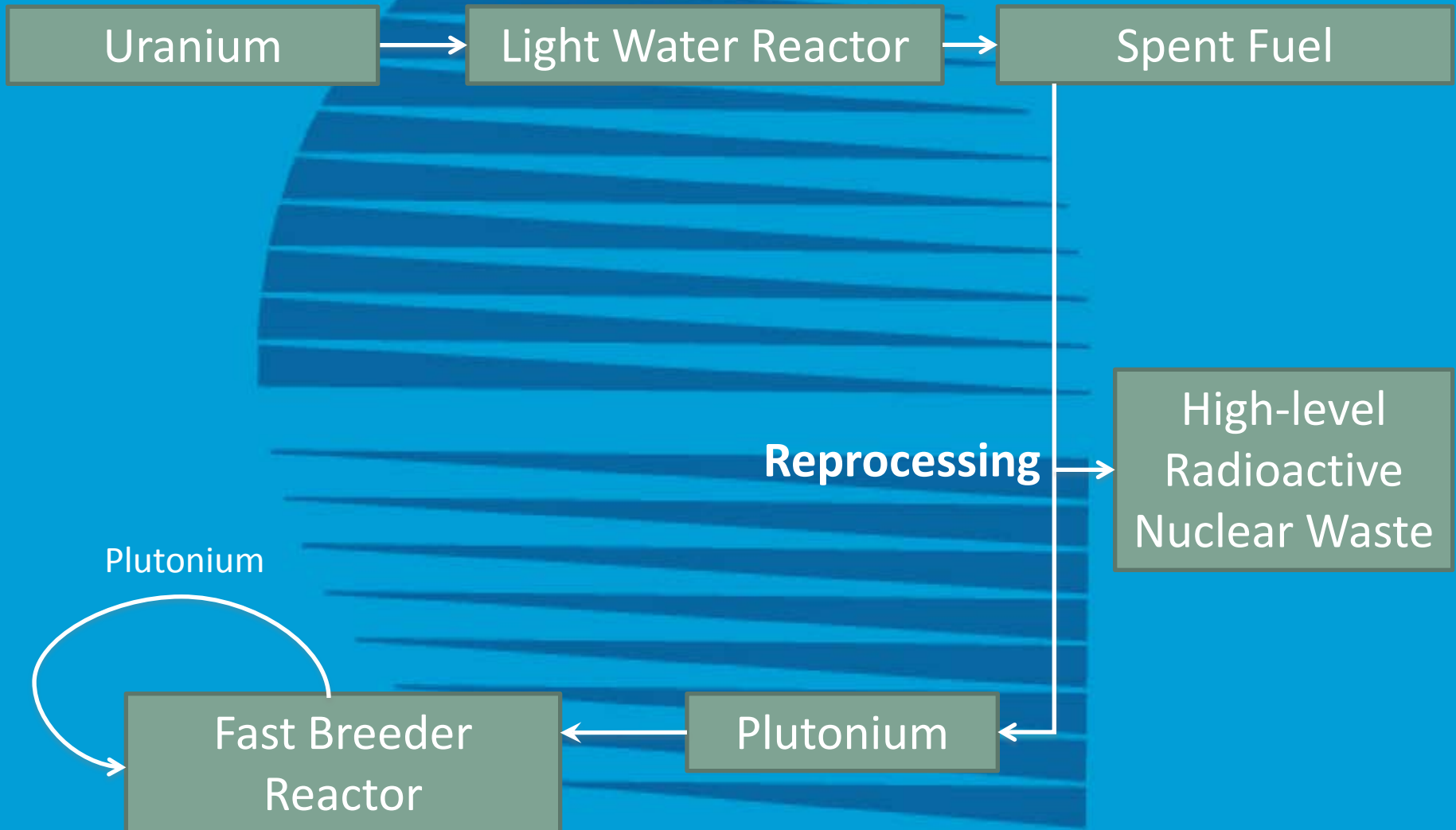


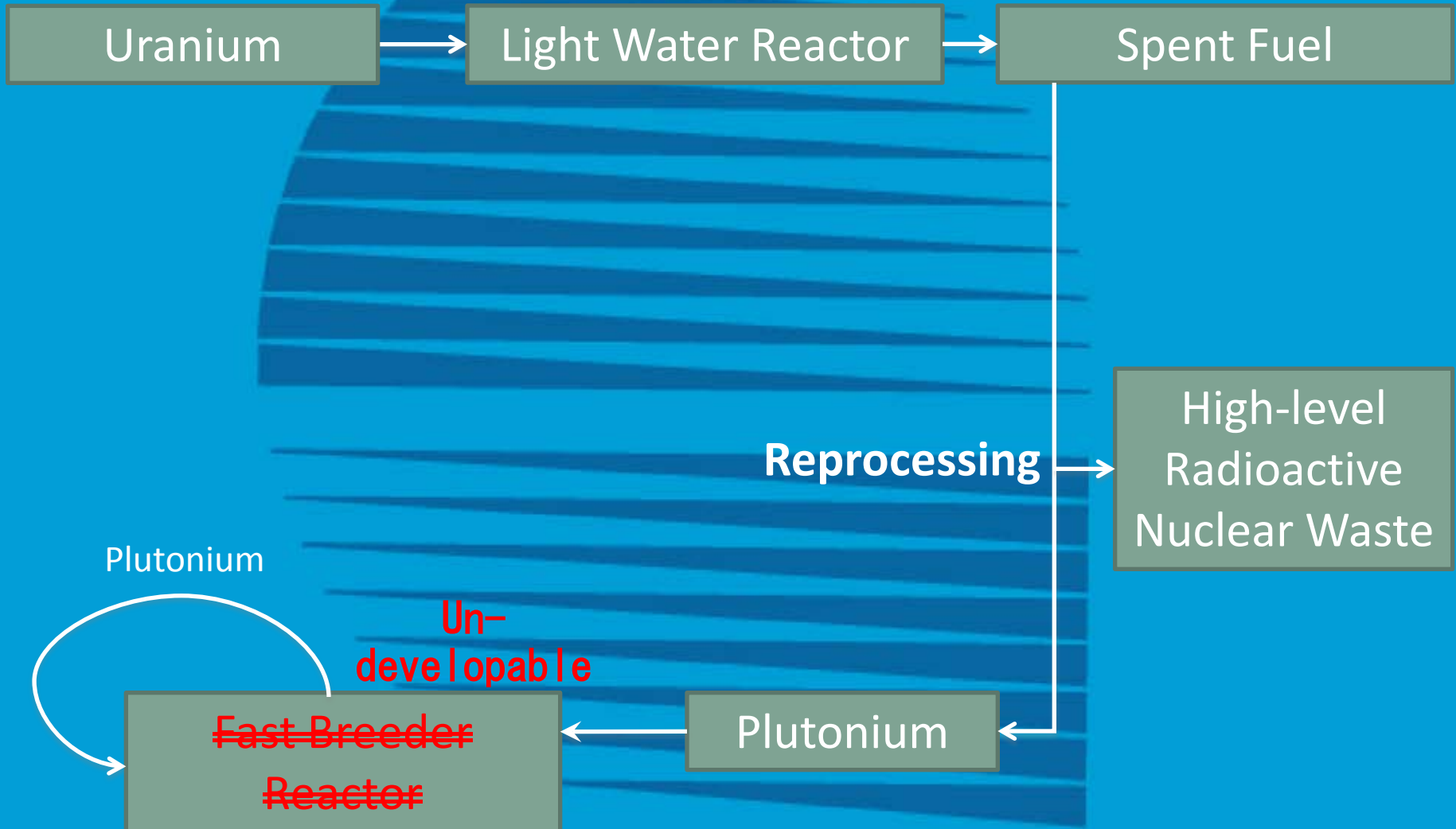
Nuclear Fuel Cycle: A Rosy Future



Failed Fast Breeder Reactor

- Almost US\$30 Billion Spent from 1967 to Today
- Major Accident in 1995 and the Project Put on Hold
- Development Target Delayed for 70 Years from 1980s to 2050s.

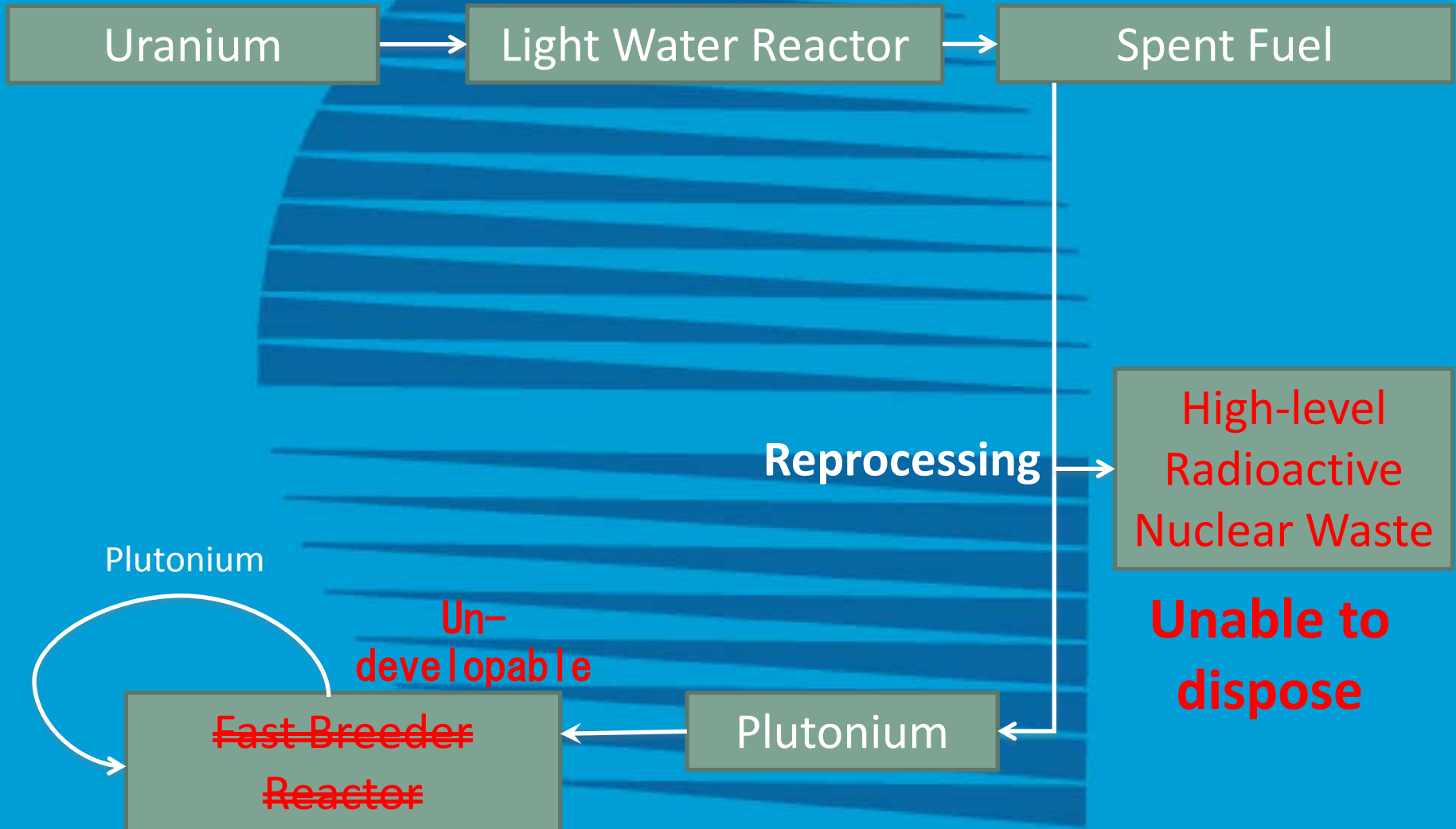
Nuclear Fuel Cycle: **Problems!**



Final Disposal in Doubt

- Gov't Promised find the place by 2028
- But ...
Earthquake in Kobe in 1995 & East Japan 2011
Volcanos & Underground Water Everywhere
- Where to Dispose the Nuclear Waste?

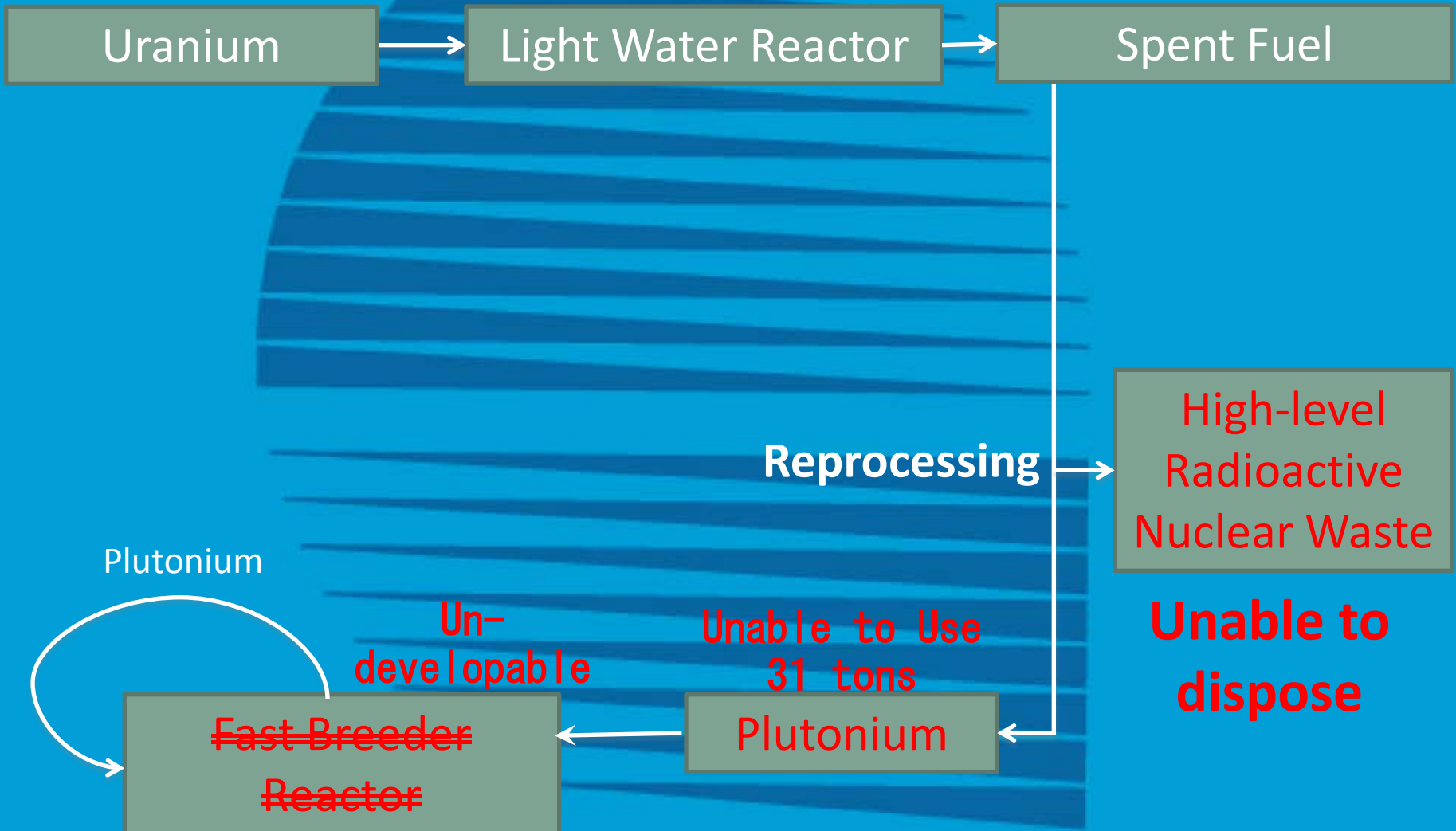
Nuclear Fuel Cycle: **Problems!**



Plutonium, More Plutonium

- Spent Fuel Already Re-processed in UK & France
- Now Japan Has 31 Tons of Plutonium
- FBR to Burn Plutonium Will Not Be Available
- What to Do with Plutonium?

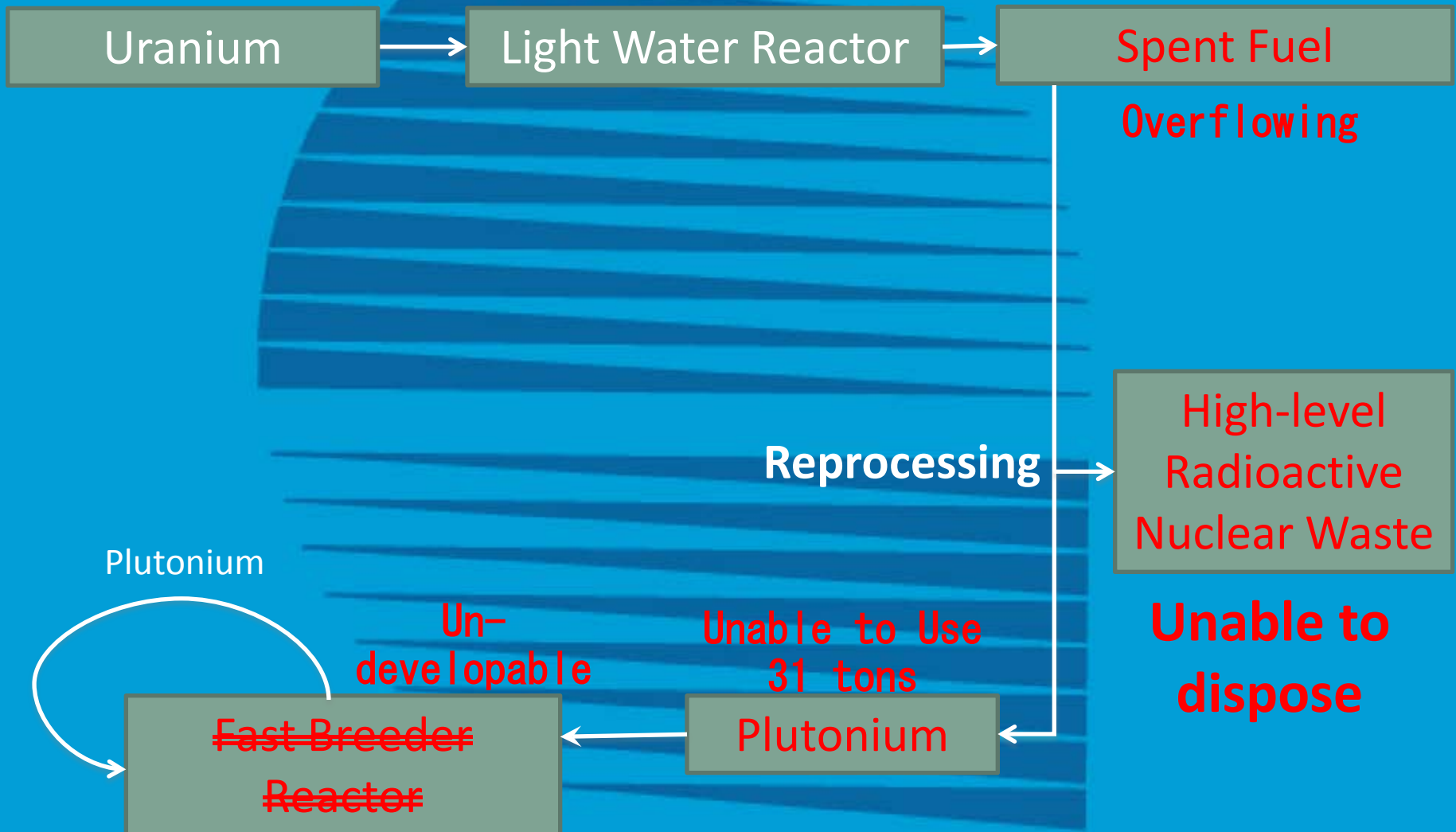
Nuclear Fuel Cycle: **Problems!**



Overflowing Spent Fuel

- 1000 Tons of Spent Fuel Every Year
- Space Available for 6000 Tons of Spent Fuel Only
- Building a New Facility for 5000 Tons
- Will All the Reactors Stop after 11 Years?

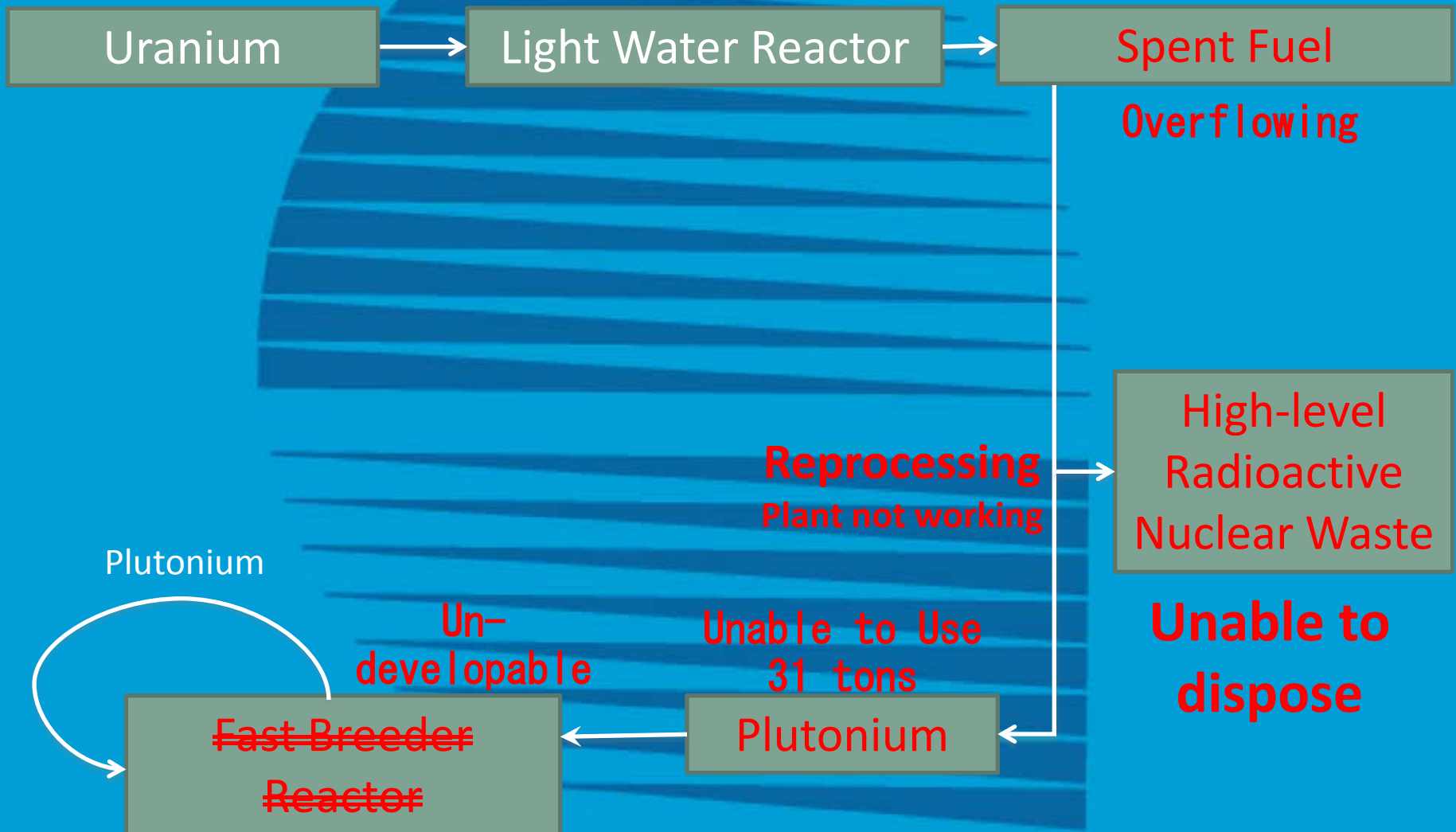
Nuclear Fuel Cycle: **Problems!**



Another US\$30 Billions Wasted

- Re-processing Plant Has Been Built with Another US\$30 Billions
- Accident-prone Re-processing Plant Not Ready for Operation 7 Years After the Completion
- If It Runs, It will Produce 5 Tons of Plutonium Every Year, then, What to Do with More Plutonium

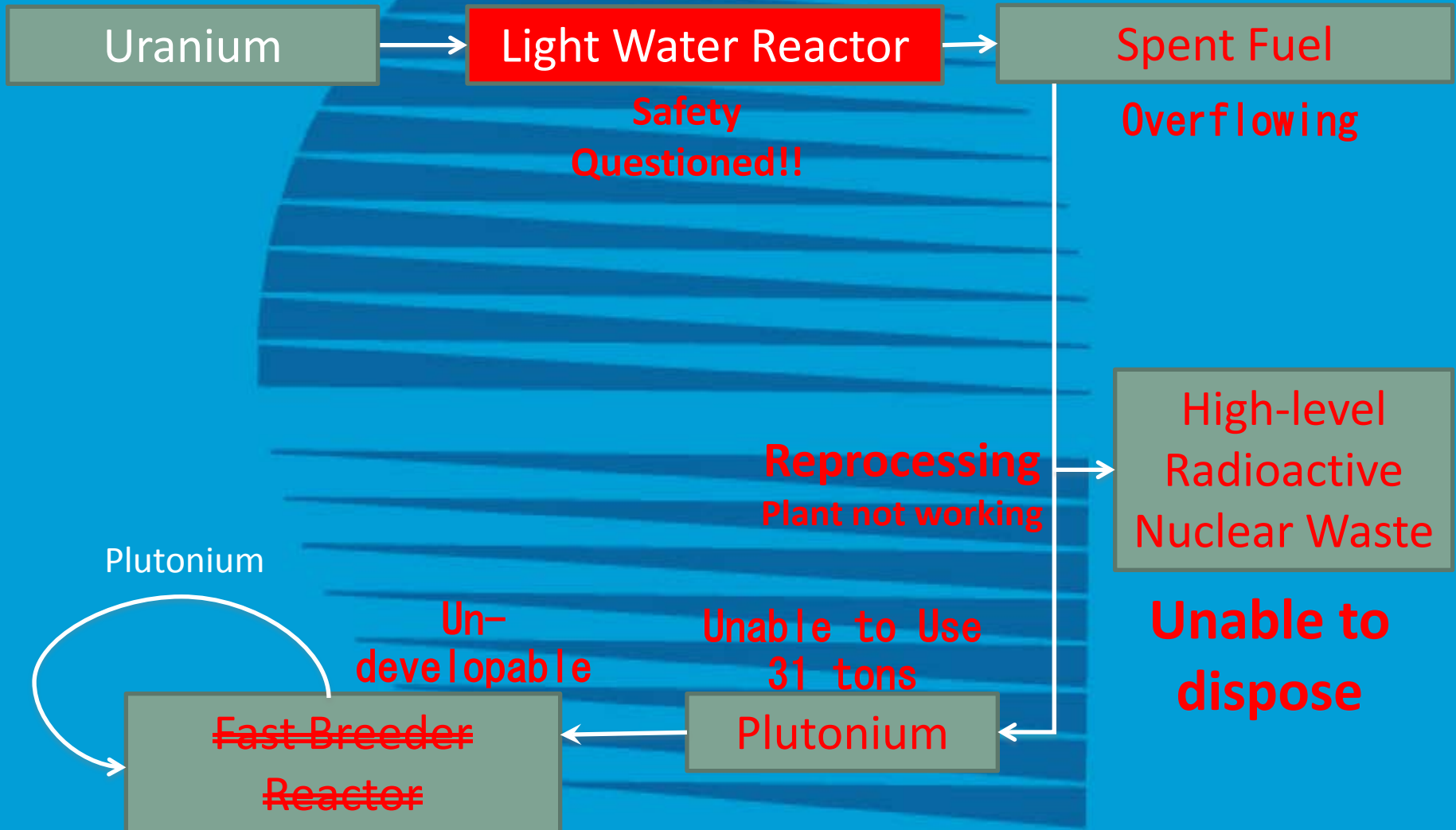
Nuclear Fuel Cycle: **Problems!**



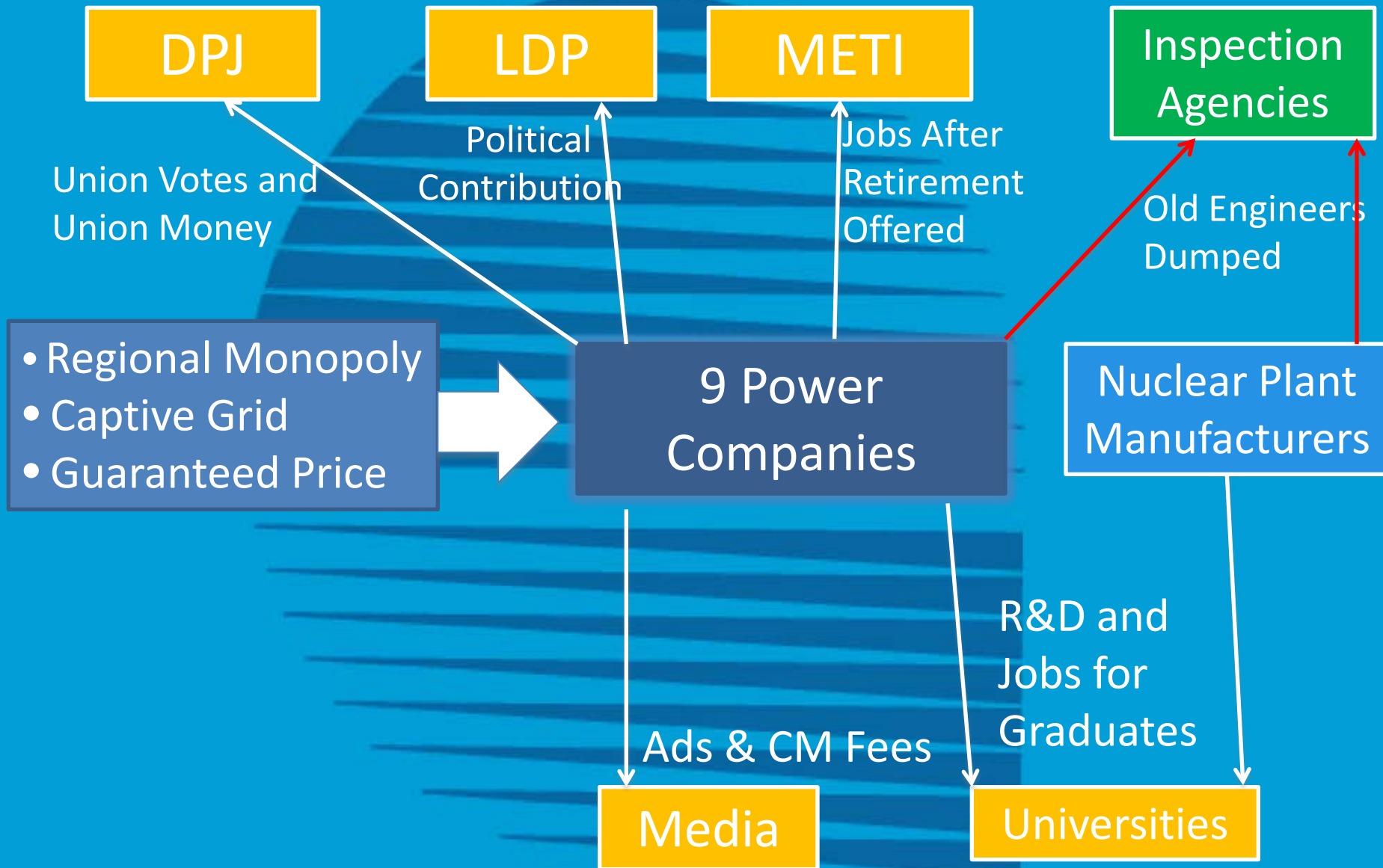
Safety Compromised

- On March 11, a Major Accident Hit Fukushima Daiichi
- TEPCO & Gov't Hid the Information
- TEPCO & Gov't Hid the Meltdown
- TEPCO Had Hidden a Critical Accident for 29 Years and Hid Many More

Nuclear Fuel Cycle: **Problems!**



The Corrupted “Nuclear Village”



METI the Promoter & Regulator

- METI, Ministry of Economy, Trade & Industry Promotes Nuclear Industry
- NISA, the Nuclear Regulator, Is Placed Under METI
- JENS, the Nuclear Inspector, Is Placed Under METI
- JENS Hires Engineers from Power Companies and Nuclear Plant Manufacturers

Budget Issues

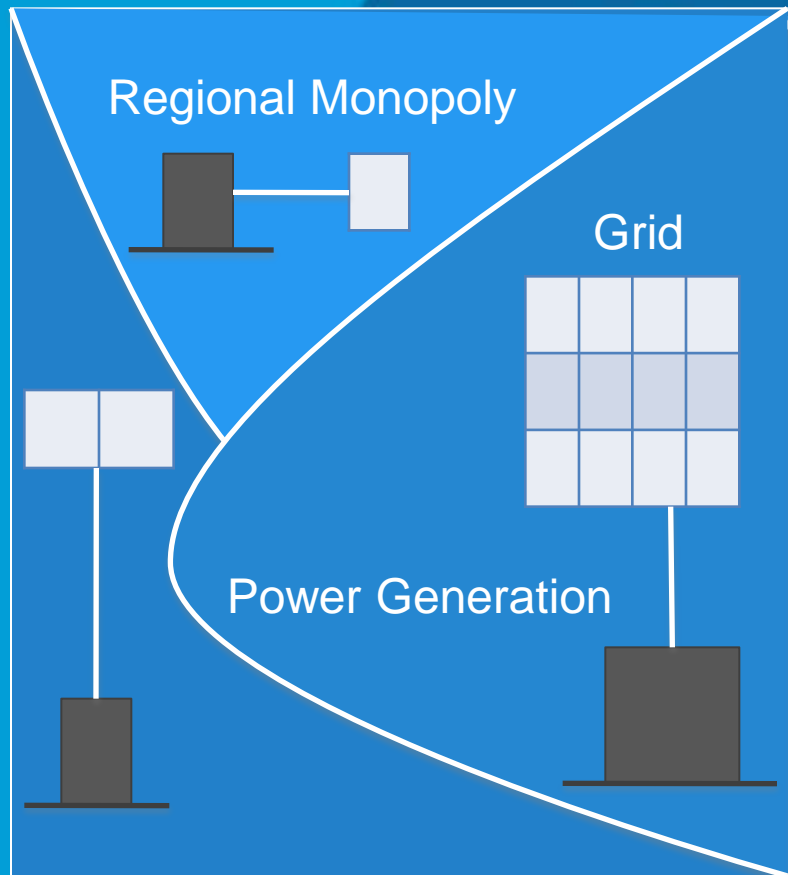
	METI		Ministry of Education	
Nuclear Waste Related	US\$62 Million	4%	US\$82 Million	4%
Nuclear Accident Related	US\$58 Million	4%	NONE	0%
Other	US\$1.4 Billion	92%	US\$2.2 Billion	96%
TOTAL	US\$1.5 Billion		US\$2.3 Billion	

Even After the Fukushima Accident,
Nuclear Budget is Wasted

Guaranteed Electricity Price



Regional Monopoly & Captive Grid

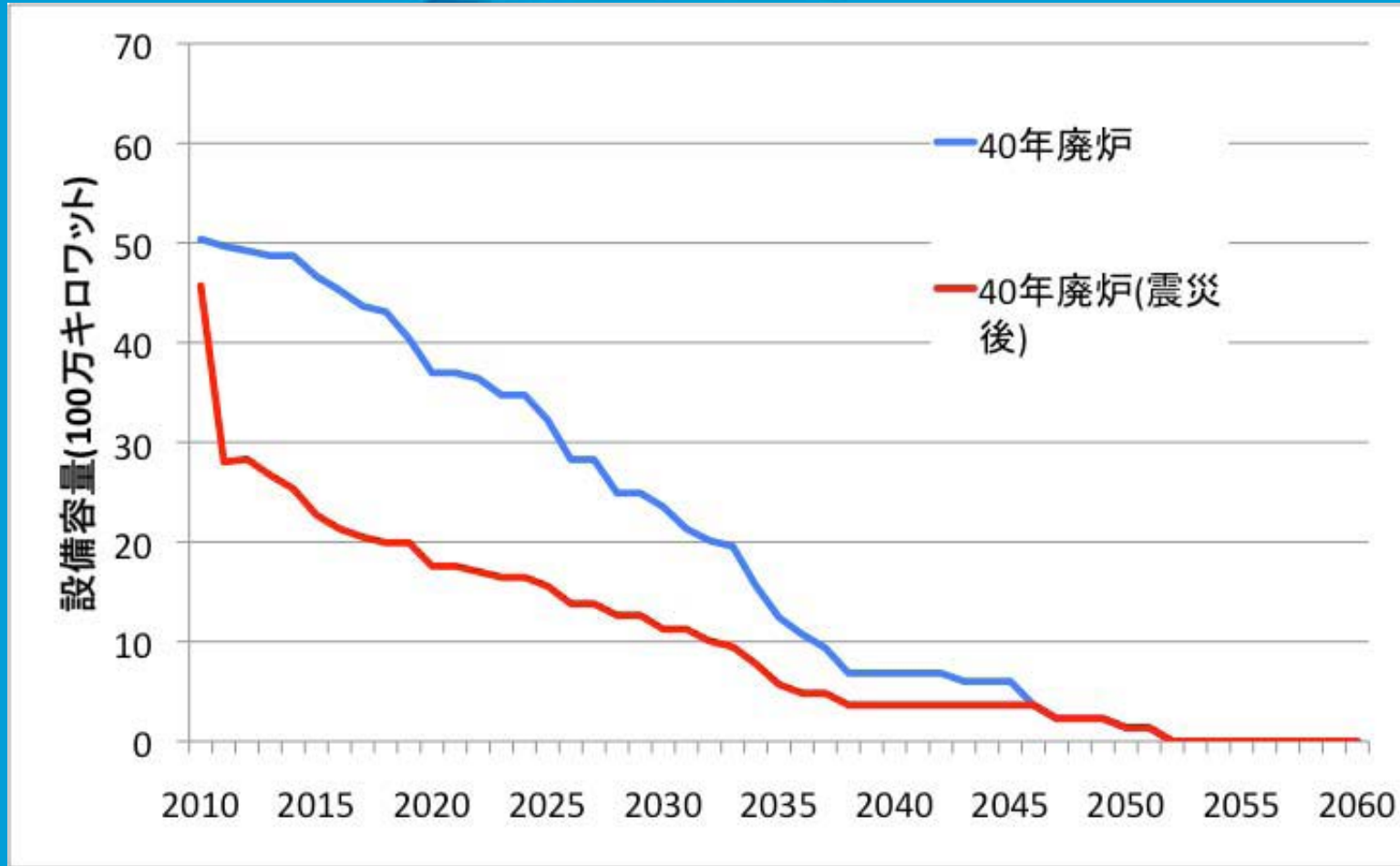


Consumers are not allowed to choose the Power company.

New Renewables are easily denied the access to the Grid.

Nuclear Fade-out in Japan

No New Reactors and 40-year Life for the Existing Reactors



Path to the Future

