# LEGACY MEETS DESTINY

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## CLOSING THE FUEL CYCLE WITH MCycle

a novel solution for nuclear waste recycling, that eliminates nuclear waste and produces the fuel of the future



The LaHague Facility has an approximate footprint of 2.3 sq mi.

### STATE-OWNED VS PRIVATE ENTERPRISE

With its modular, compact, scalable, and proliferation resistant design, the **NuCycle™** facility would be the size of Soldier Field, Chicago, in comparison, to the facility in LaHague, France, which has a footprint the size of Downtown Chicago. This outdated and uneconomical solution makes the case for **Curio's™ NuCycle™** technology.



NuCycle facility has a projected footprint of 0.62 sq mi.

#### THE **NUCYCLE™** PROMISE

- The NuCycle<sup>™</sup> process will reduce quantity of waste by more than 95% and radiotoxic lifetime by more than 99.7%
- Products include feed for uranium enrichment plants, fuel for advanced reactors, feed for Pu-238 production, and material for next-gen nuclear batteries
- Enormous upsides for consenting state including nuclear fuel exports and guaranteed tax revenues for the lifetime of the NuCycle<sup>™</sup> plant

#### **RADIOTOXIC LIFETIME**

above background levels (in years)			
Status quo		After NuCycle	
130,000		300	
PRODUCTS FROM NUCYCLE			
(in MT)			
Uranium 3.5 wt%	TRUfuel™	Np-237 feed	Beta-emitters
800	40	1.6	2.4
95% reduction in the quantity of initial waste			



#### THE SECOND NUCLEAR ERA™