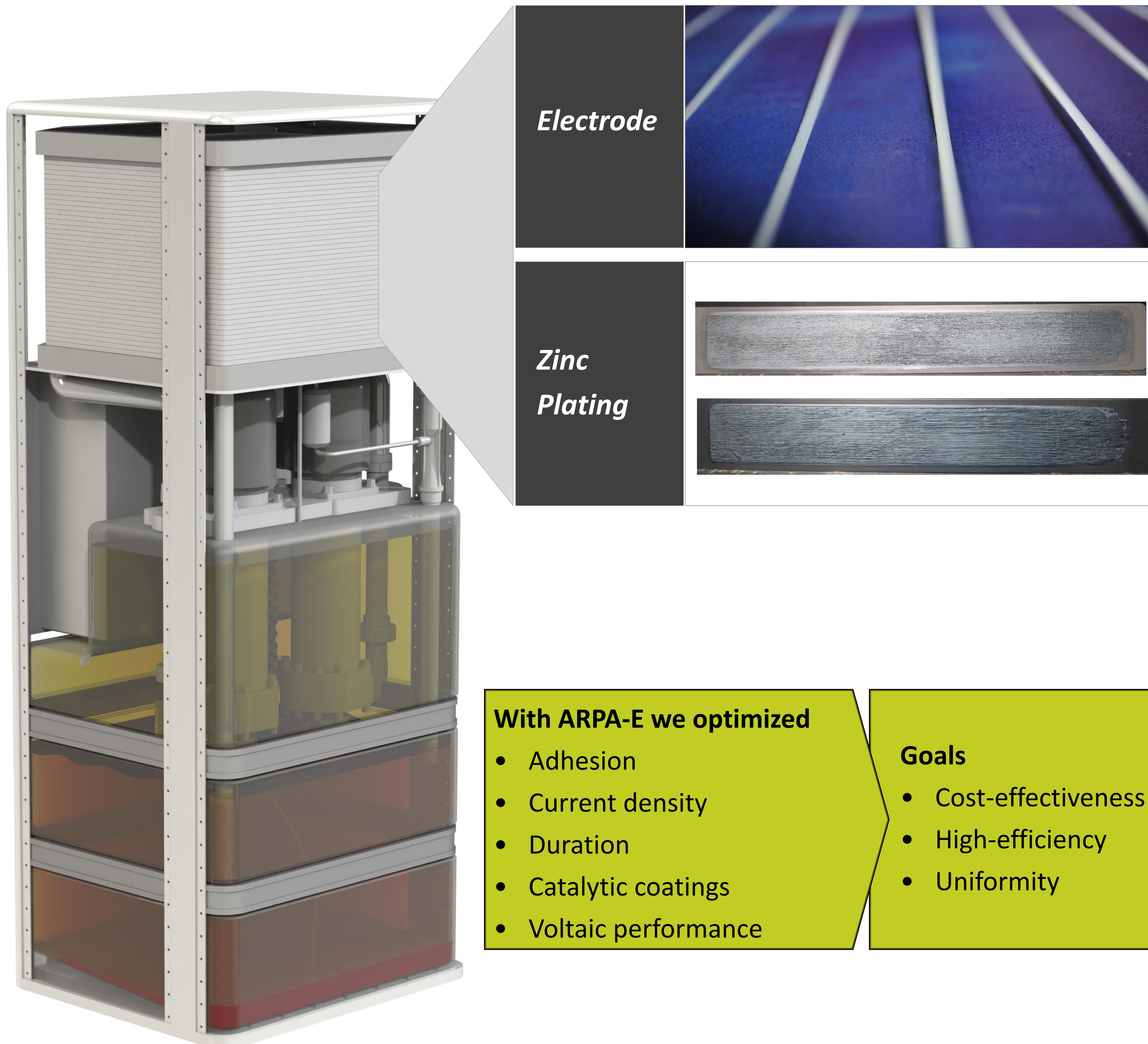
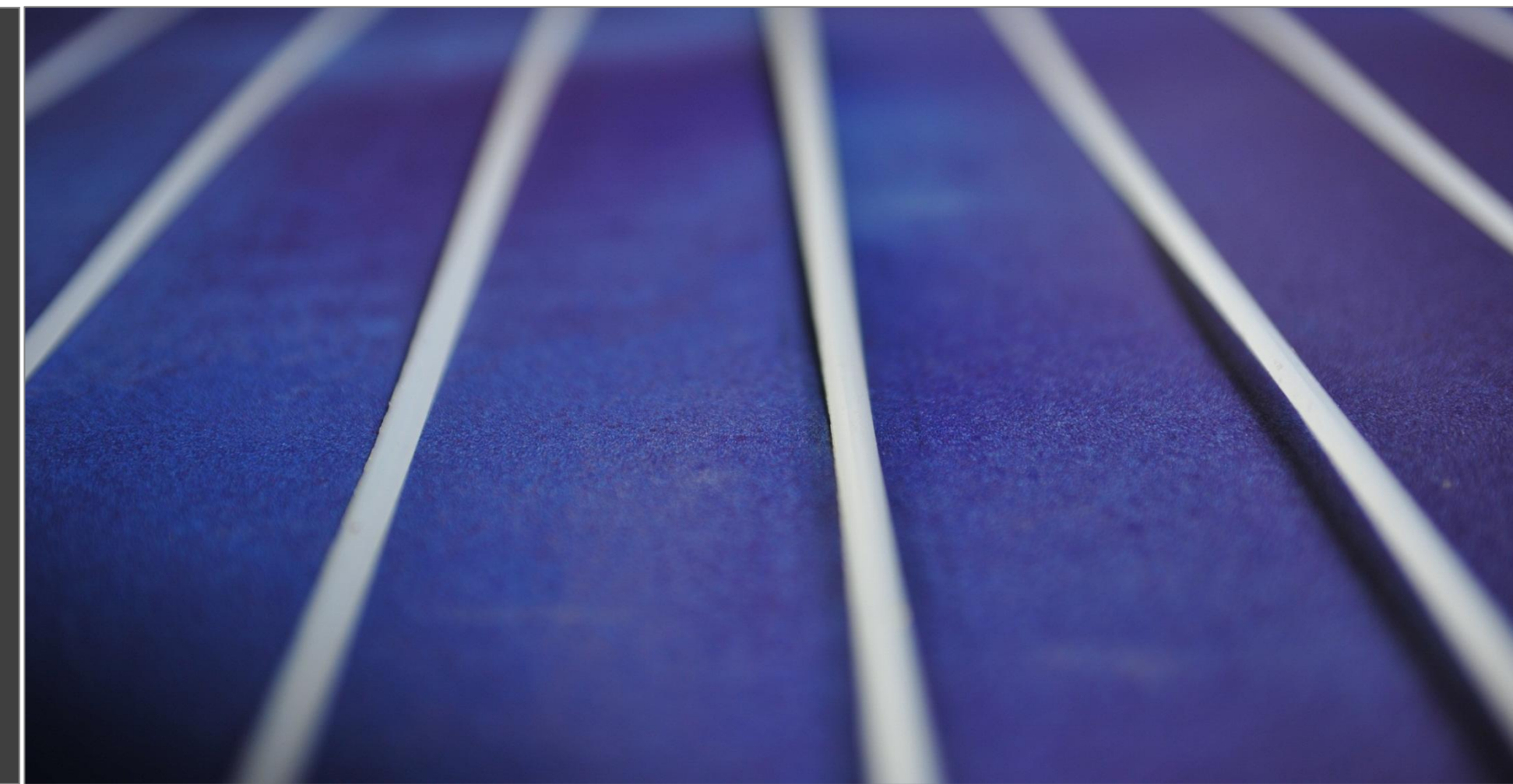


## Low Cost, High Performance and Long Life Flow Battery Electrodes

*ARPA-E has enabled Primus Power to create an innovative and technically advanced electrode*



**Electrode**



**Zinc  
Plating**



### With ARPA-E we optimized

- Adhesion
- Current density
- Duration
- Catalytic coatings
- Voltaic performance

### Goals

- Cost-effectiveness
- High-efficiency
- Uniformity

*This, combined with our other advances has enabled us to create a unique flow battery system with ...*

- ✓ *Low cost electrodes*
- ✓ *Long life*
- ✓ *High efficiency*
- ✓ *Flexibility*



*For...*

- *Ubiquitous*
- *Dispatchable*
- *Cost effective*

*... grid-scale electrical energy storage to:*

- *Accelerate renewable energy*
- *Reduce CO<sub>2</sub> emissions*