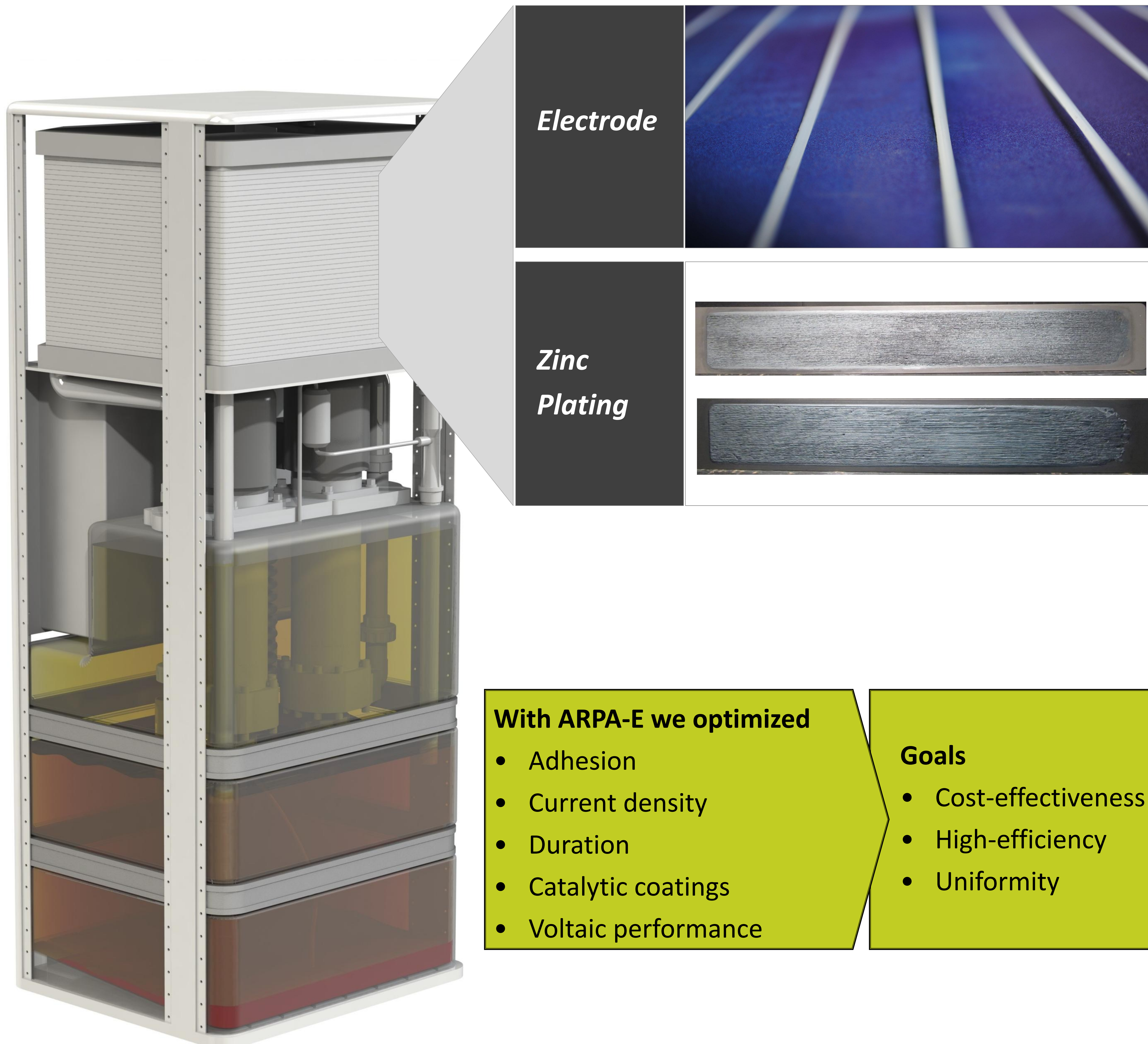
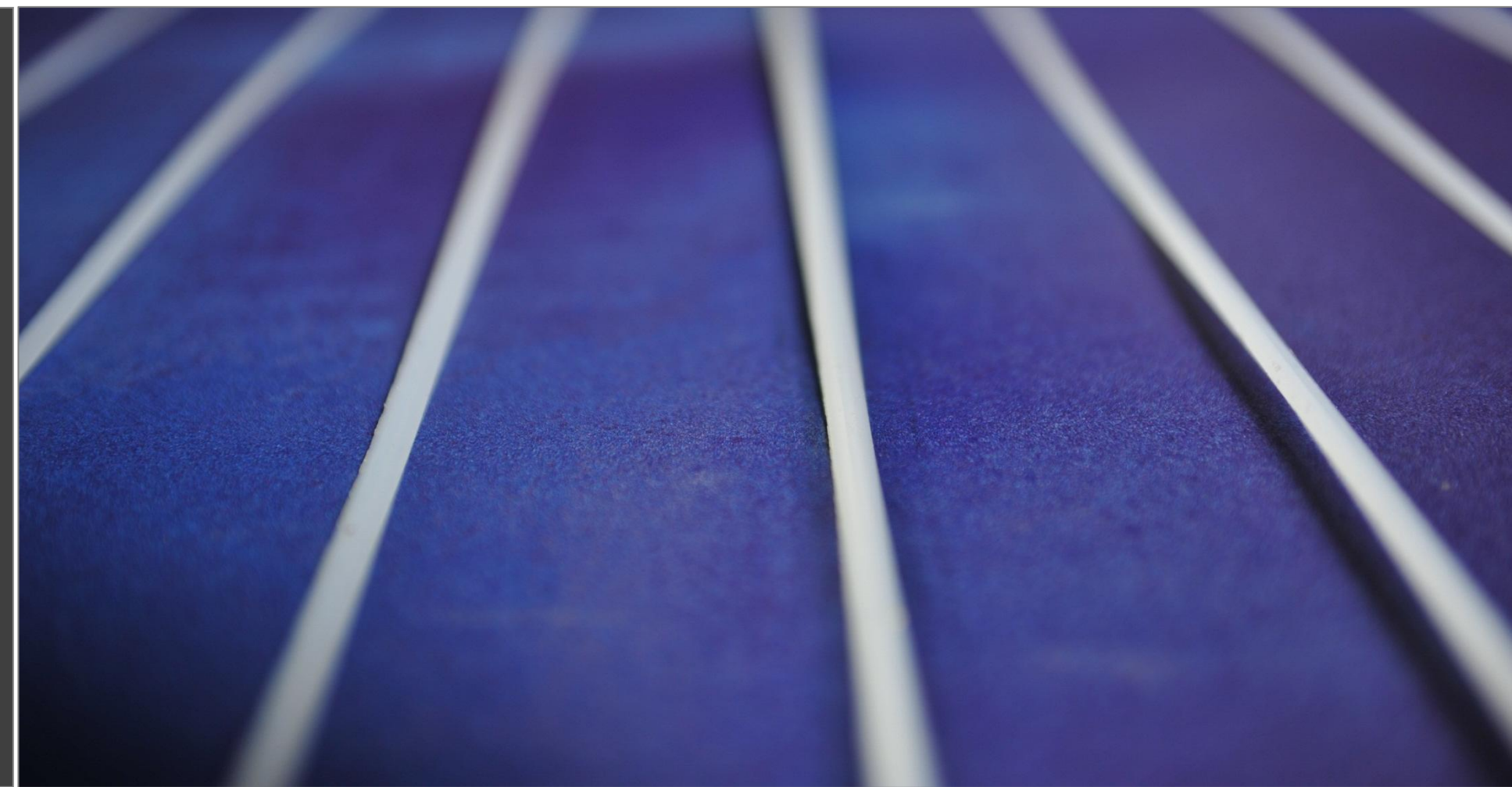


## Low Cost, High Performance and Long Life Flow Battery Electrodes

*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