



Sustainability at NY Creates

SEMICON Europa

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November 19th, 2025

Sustainability at Creates

Creates Sustainability Mission



Embed Sustainability into
NY Creates to Support
Future Growth by Reducing
Costs & Removing
Constraints



Collaboration with Industrial
Partners to Drive Business
Value for Sustainability
Efforts



Test-Bed for Development
of Sustainable Materials
and Processes for the
Semiconductor Industry

Test Bed Capability Development

- Creates is structuring Test Bed capabilities in the most critical sustainability areas for semiconductor industry



Creates Sustainability Test Bed Capabilities					
GHG Emissions	Alternative Etch Gases	Waste	Chemical reclaim	GHG Emissions	HTF alternatives
	Dedicated LAM Chamber FTIR measurement Test vehicle		Set up infrastructure for evaluation of different chemistry reclaim processes Which tools?		Set up infrastructure for evaluation of alternatives HTF materials? Which tools?
	**Alternative Clean Chamber gases	Water	UPW reclaim		
	FTIR testing for emissions validation		Set up infrastructure for evaluation of different technologies for UPW reclaim Which tools?		
ALL	New abatement technologies	ALL	High NA EUV/Track Sustainability		
	Set up in parallel different abatement systems for evaluation and comparison		Set up infrastructure for sustainability evaluation of different chemistries and processes		
PFAS	Waste Water PFAS abatement		Waste Water PFAS Sensing		
	Set up infrastructure for evaluation of different wastewater PFAS abatement technologies		Set up infrastructure for evaluation of wastewater PFAS sensing technologies		
				PFAS-free Photoresist	
				Dedicated process flow	
				PFAS Gas sensing	
				Set up infrastructure for evaluation of different PFAS gas sensing technologies	

Alternative Etch Gas Chemistry Test Bed



How?

- Build, demonstrate, and sell test bed capabilities to execute alternative Etch Chemistry Evaluations

Why?

- Industry focus to reduce GHG emissions without compromising performance, safety, and cost.

Potential Customers

- Gas suppliers
- Equipment manufacturers
- Fabs
- Consortia

Sustainability Value

- TSV Silicon Etch
 - Long etch, identified as gap and opportunity
- Dielectric Etch
 - Low-GWP alternatives for HFC etch gases

Embedding Sustainability in On-site Operations

- Creates is implementing sitewide systems to drive efficiencies in use of power, water, wastewater and emissions



A cloud-based, real-time monitoring solution to improve energy efficiency and reduce operational cost



Collaboration with Industrial Partners

- Drive business value for sustainability efforts through collaborative investments and outcomes



Semiconductor
Climate Consortium



Thank You!

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