NEXT Energy Technologies, Inc.

Innovation Showcase Presentation

Beaver Creek, Colorado | September 20th, 2018

IN²

Founded by: WELLS FARGO NREL NATIONAL RENEWABLE ENERGY LABORATORY


BEAUTIFUL ENERGY
WINDOWS THAT GENERATE ENERGY FROM THE SUN
IN2
NEXT

NEXT Brings Buildings To Life

The Challenge: Net-Zero Buildings

WE LIVE IN A CLIMATE CONSTRAINED WORLD

40%

Buildings consume roughly 40% of global energy (more than industry or transportation) and represent 40% of greenhouse gas emissions

BUILDINGS ARE A VITAL PART OF THE EQUATION

#1

Energy is the #1 variable operating expense for commercial buildings

MOVING TO NET-ZERO REQUIREMENTS

100%

Of new commercial buildings in Europe will be designed to near zero energy standards by 2020

European Commission

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The Opportunity: An Explosive New BIPV Glazing Market

GLOBAL TREND TOWARDS ENERGY NEUTRAL BUILDINGS

Regulatory regimes firmly pushing towards zero net energy buildings in the US, Japan, & Europe

SIGNIFICANT MARKET GAP

The market demands exceptional aesthetics along with performance and cost-effectiveness, an unmet objective in the industry

Glass will play a central role, as it represents up to 100% of commercial building surfaces

HUGE NEW MARKET FOR THE RIGHT TECHNOLOGY

$370B

by 2035

ZERO ENERGY-RELATED PRODUCTS & SERVICES MARKET FOR GLAZING

Source: Net Zero Energy Buildings Report, Navigant Research, 2017

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Value Proposition: Beautiful. Transparent. Renewable Energy.

AESTHETICS

+ Exceptional transparency
+ Color and light transmissions fully customizable

PERFORMANCE

+ Stable materials provide 30 years of reliable energy production, even at high angles and low-light conditions

ECONOMICS

+ Reduced encapsulation & BOS costs
+ Incremental BIPV window cost delivers 1-year payback in the U.S.
+ Seamless integration into buildings

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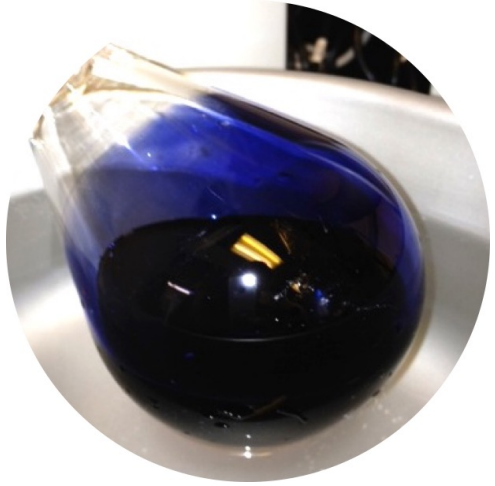
Game-Changing Technology & Process



Low Cost	Long Lifetimes	Attractive Aesthetics	High Efficiency

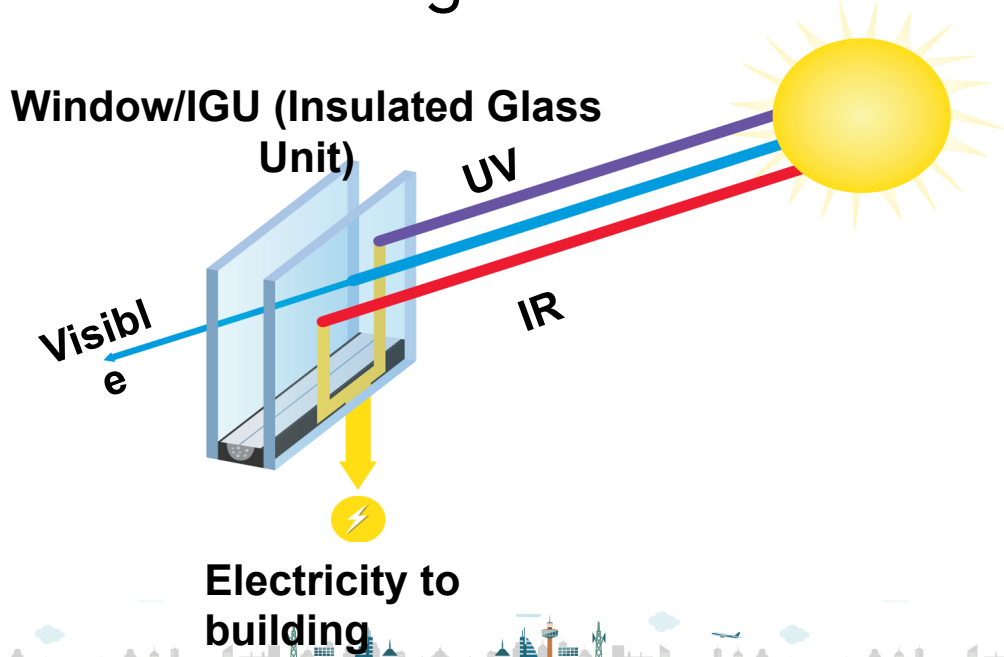
SSM-OPV = Soluble + Small Molecule + Organic + Photovoltaic

TRANSPARENT photovoltaic coatings printed on glass

Transforms UV and IR light into electricity

Eliminates encapsulation costs of solar

Seamless integration into windows



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Potential Impact (Energy/Resource Savings)

LOW COST, HIGH EFFICIENCY, SEAMLESS INTEGRATION AND LONG LIFETIME DRIVE ECONOMIC VALUE FOR BUILDINGS

~$300K
Average annual electricity savings

~1 year
Simple-payback

~40%
Energy offset (Zero Energy Bldg.)

~36,500 MWh
Cumulative Electricity produced

~27,100Mt
Cumulative CO2 savings

=

GHG emissions: 5,817 passenger vehicles driven for one year

Key assumptions
- Net Zero building energy use per sf is 6.1kwh/sf based on New Building Institute analysis
- Solar insolation based on NASA POWER
- 7% power conversion efficiency
- 0.25% annual degradation
- 30 year lifetime
- $0.156/kWh blended electricity cost
- Source: EPA Equivalencies Calculator

Sacramento, CA Business Case:
- Wells Fargo Center (standard skyscraper almost square dimensions)
- ~500,000 s/f building (30 floors)
- South, East, West-facing facades only (excludes North)
- 60% window-to-wall ratio
- Glazing area of 16,022 m2

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Huge Market Opportunity and Clear Addressable Market

WITHIN A HUGE GLOBAL FABRICATED WINDOW MARKET, NEXT WILL FOCUS ON THE COMMERCIAL NEWBUILD MARKET FOR INSULATED GLASS UNITS (IGU)

$235B (30B ft²)
GLOBAL FABRICATED WINDOW MARKET
GROWING AT 5% PER YEAR

~$50B (~6.5B ft²)
GLOBAL COMMERCIAL IGU MARKET FOR NEWBUILD & MAJOR RENOVATION

In 2027, NEXT conservatively targets 0.8 % of this market, representing 0.5B in sales

Seamless Supply Chain Integration – At Fabricator Level

Reduces Risk | Removes Barriers | Accelerates Speed To Market

Partner Highlights:

- Fabrication partner closely involved in defining product specs based on knowledge of customer preferences and requirements
- Installs final production line at its manufacturing facility using NEXT technology
- Dedicates resources and leads sales and marketing efforts for NEXT PV-IGUs

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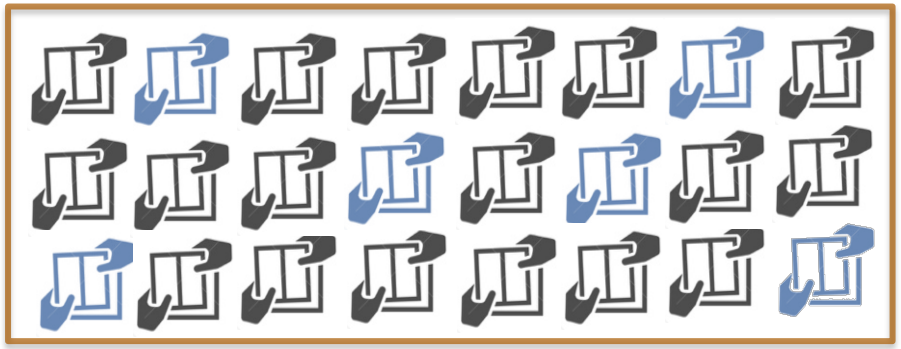
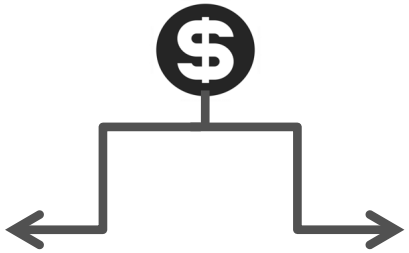
Capital Efficient Business Model

TECHNOLOGY LICENSING TO GLASS FABRICATION PARTNERS

REVENUES FROM ROYALTY PAYMENTS AND INK SALES



Ink Sales



Royalty Payments

JOINT DEVELOPMENT & LICENSE AGREEMENT IN PLACE WITH TOP U.S. WINDOW FABRICATOR

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Current Status: Prototypes & Scaling to Large Area

GREATLY REDUCED TECHNOLOGY AND SCALE-UP RISK THROUGH EXECUTION FOCUS AND INDUSTRIAL PARTNERSHIP

Other Milestones & Achievements

NEXT IS FUNDED BY THE U.S. DOE & NSF SBIR PROGRAMS. THESE EXTREMELY COMPETITIVE GRANT PROGRAMS ARE AN INDEPENDENT VALIDATION OF NEXT's TECHNOLOGY, TEAM AND COMMERCIALIZATION PLAN

GRANT AWARDS AND VALIDATION

$5.4 million in grant funding awarded

Powered by SunShot U.S. Department of Energy

Energize California — AN LACI INITIATIVE

Invited to California Energy Commission's state-wide initiative to drive energy innovation

Recognized as 2018 HIVE 50 Innovator Honoree

U.S. Green Building Council Chapter — Los Angeles

Grand Prize (overall winner) at the 1st Sustainable Cities Tech Challenge, a global competition sponsored by the USGBC-LA

IN2 Founded by NREL

Next Steps

CLEAR MILESTONES TO COMMERCIALIZATION

- Product Specifications
- Industry Qualifications & Certifications
- Demonstration Installations
- Demonstrate Pilot Production Line
- Additional Licensees for new regions and market segments