



**Financials** 

January 15, 2025

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Company Confidential

### Safe Harbor Statement

This presentation contains forward-looking statements, including statements regarding the company's plans and expectations regarding the development and commercialization of our technology. All forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. The forward-looking statements speak only as of the date of this presentation. The company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any such statements to reflect any change in the company's expectations or any change in events, conditions or circumstances on which any such statements are based.



## Brilliant Light Electric Power

- Breakthrough in 2020 and 2023. We have developed a
  demonstration 250 kW steam boiler to produce hot water
  and steam run continuously daily for over 100 hours in
  aggregate to prove the commercial competitiveness of the
  Hydrino power source. Transitioned to development of a
  commercial prototype optical power source ("SunCell®") to
  produce electricity by concentrator photovoltaic conversion
  in 2023.
- Independently validated results by [3] leading professors/labs.
- Large addressable markets: capable of serving the \$16.3T/y electrical stationary power, electrical motive power, thermal markets corresponding to essentially the world's power markets.
- Total Electrification: Essentially every imaginable power consuming device in the world can be electrified with proven, cost competitive, reliable, safe, UL approved, warranted systems, mass-produced and supported by the world's OEMs. The SunCell® can power these devices completely autonomously of fuels and grid infrastructure, operating in essentially any environment at greater power density and power to weight ratio than any prior known power source.
- With one-years production, the 15TW peak generating capacity of the world can be supplied by 60M, 250kW SunCell® without any pollution including greenhouse gasesclimate change crisis gone.



Reinventing power: safe, accessible, affordable, clean



# Brilliant Light Power's Path Forward

- We are pursuing commercial electrical power sources for essentially all power markets at the modular scale of 100-250 kW.
- We plan to lease autonomous TPV-SunCells on a time-ofuse basis with no metering for all markets except for sales to auto manufacturers as passenger car and light-duty truck power sources due to the unique high power, relatively low kWh demand of these vehicles.
- We anticipate that green energy presales, licensing fees, and debt financing backed by kWh revenue streams will finance the commercial deployment.





















# Brilliant Light Power's Path Forward

- The TPV-SunCell Electric Power systems are capable of being commercialized using known vendor-supplied components given in the corresponding bill of materials.
- We plan to at least partially outsource the development of commercial products from our current pilot systems using contract commercialization companies such as SwRI, Fraunhofer, and Battelle.
- All aspects of commercialization can be achieved under fee for materials, labor, and service contracts. We plan to outsource fabricated parts and assembly to large contract manufacturers such as Flex, Sanmina, and Jabil and outsource installation and maintenance to EPC firms such as Bechtel, Fluor, and Henkels and McCoy.







We believe that Brilliant's SunCell® is the most important energy technology ever.

















# Brilliant Light Power's Path Forward

- We are acquiring spectral power measurements on continuous commercial scale optical power to provide specifications to TPV manufacturers such as Arzon Solar, Azure Space, and Boeing Spectral Labs.
- To launch commercialization, we are pursuing validation through industry testing of the optical power and corresponding applications.
- Theory resistance will be addressed by further independent Hydrino analytical validation.







We believe that Brilliant's SunCell® is the most important energy technology ever.









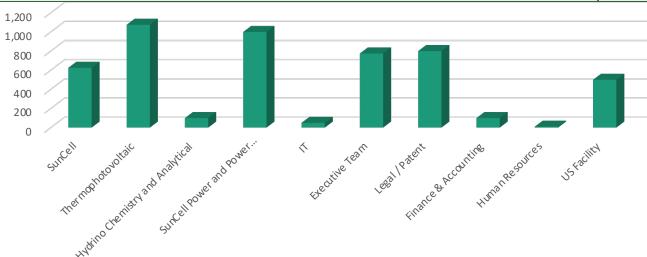




### Use of Funds

### This capital raise gets BLP to first revenue and bridges to IPO

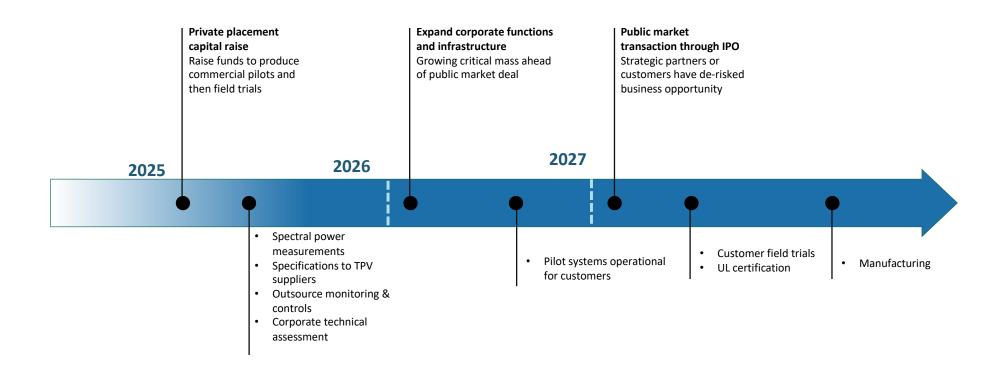
Use of Investment Funds (\$ thousands)	2025	2026
SunCell	625	625
Thermophotovoltaic	1,075	1,075
Hydrino Chemistry and Analytical	100	100
SunCell Power and Power Conversion Equipment and Supplies	1,000	1,000
Total R&D	2,800	2,800
Total IT	50	50
Executive Team	775	775
Legal / Patent	800	800
Finance & Accounting	100	100
Human Resources	10	10
US Facility	500	500
Total G&A	2,185	2,185
Annual Total	5,035	5,035
Total 2025 + 2026	10,070	





### Go-To-Market Model

Plans to advance to commercialization with TPV-SunCell® for total world electrification





### TPV-SunCell® Markets



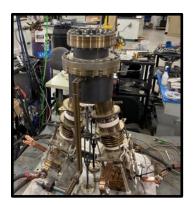


- Stationary Electric Applications
  - \$4.8T addressable market. Electric lease revenue model.
- All-Electric Thermal Applications
  - \$3.5T addressable market. Electric lease revenue model.
- Motive Electric Applications
  - \$8T addressable market. Car sales revenue model. Lease revenue model for large kWh usage. Strong value for weight savings, range improvement, and operating costs.



### Path to Production

Product Timing	2023	2024	2025	2025 2026 2027 2028				2030	2031
Stationary Power	Lab Unit	Demo Unit	Low Pate I	Production	Mature				
Applications \$4.8T	Now	Demo Unit	LOW Rate	rioduction	moderate	Production	mature		
150kW SunCell TPV									
250kW SunCell TPV									
All-Electric Thermal			Demo Unit Low Rate Production Moderate Production					Mature	
Applications \$3.5T			Deino Unit	LOW Male I	Todaccion	moderate	Todaction	mature	
50-100kW SunCell TPV									
150kW SunCell TPV									
250kW SunCell TPV									
Motive Electric				Demo Unit	Low Rate I	Moderate I	Production	Mature	
Applications \$8T				Dellio Oliic	LOW Rate I	Todaction	mature		
150kW SunCell TPV			_	_					
250kW SunCell TPV									

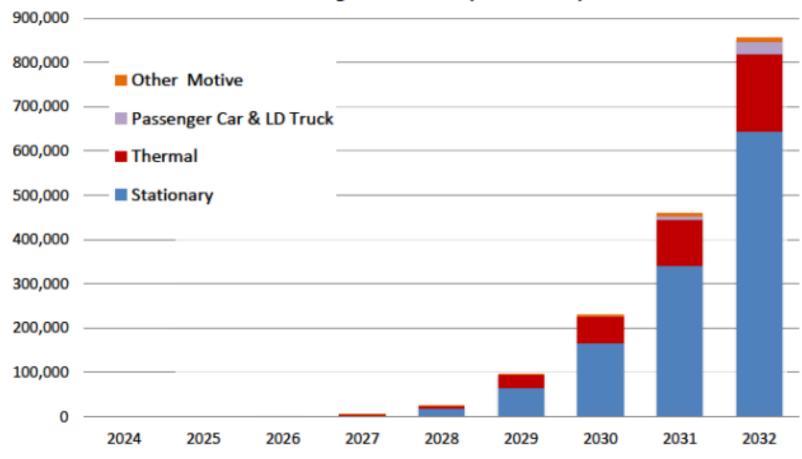


**Functioning optical power pilot** – March 2022, further TPV engineering work to produce electric demonstration unit



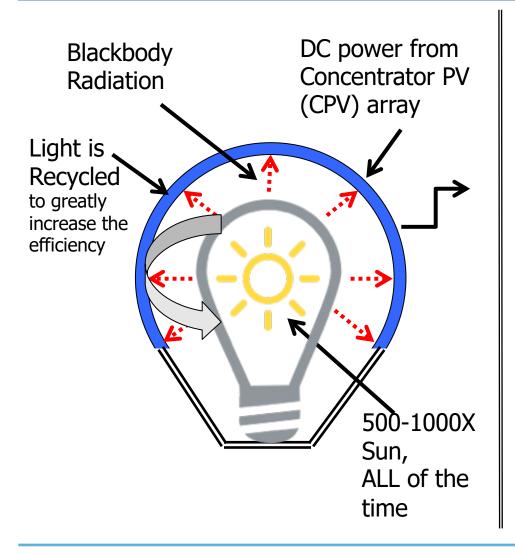
### Significant Revenue Across Initial Markets

### Brilliant Light Power Sales (USD Millions)





# SunCell® Thermophotovoltaic with Light Recycling

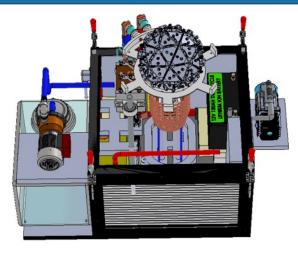


- Infrared light from the SunCell that is too low energy to be PV converted to electricity is reflected back to the SunCell and recycled.
- With light recycling the thermophotovoltaic efficiency radically increased by a factor of over 3.5 times, and with cell optimization the increase is projected to be about six times<sup>a</sup>

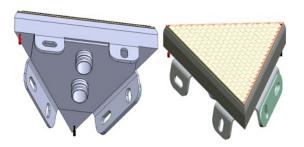


<sup>&</sup>lt;sup>a</sup> Test of infrared light recycling: Z. Omair, et al., "Ultraefficient thermophotovoltaic power conversion by band-edge spectral filtering", PNAS, Vol, 116, No. 3, (2019), pp. 15356-15361.

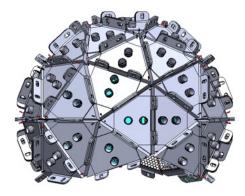
# SunCell® Thermophotovoltaic (TPV)



SunCell ® with TPV Converter



Dense Receiver Array Element



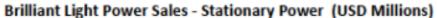
Cooling Side of Geodesic-Dome TPV Converter

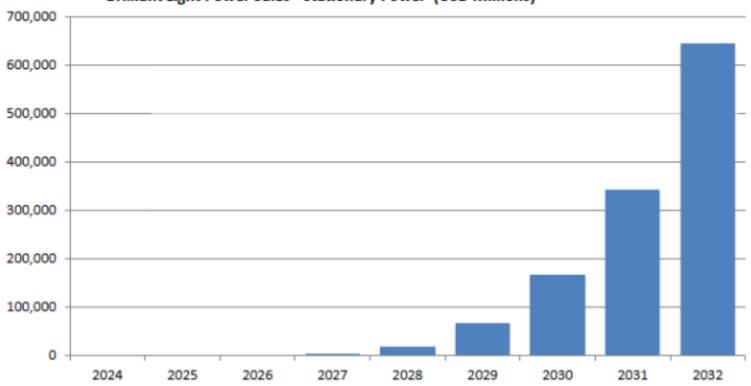


Dense Receiver Array Side of Geodesic-Dome TPV Converter



### Stationary SunCell installed base drives significant revenue





Annual Units	0	50	1,700	19,200	141,700	537,200	1,380,700	2,856,825	5,440,044
% TAM	-	0.0%	0.0%	0.1%	0.5%	1.9%	4.9%	10.0%	18.7%



# Stationary 250kW SunCell TPV – Units, Revenue & Margins

Stationary SunCell 250kW	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Lab Unit Now			roduction		Production	2000	Mature	2002
	Con Other Post	Delino onn	EGT TIME	10000000	modelate.	10000011		Tribina C	
Cumulative Units									
NA		25	525	6,525	48,525	174,525	426,525	867,525	1,639,275
China		0	50	550	4,050	21,550	109,050	262,175	530,144
EU		25	525	5,525	40,525	145,525	355,525	723,025	1,366,150
Rest of AP		0	300	2,300	16,300	58,300	142,300	289,300	546,550
Russia		0	0	500	4,000	14,500	35,500	72,250	136,563
India		0	100	1,600	12,100	64,600	169,600	353,350	674,913
SA		0	100	1,600	12,100	43,600	106,600	216,850	409,788
Ret of World		<u>0</u> 50	1,700	600	4.100	14.600	35,600	72,350	136,663
Installed Units		50	1,700	19,200	141,700	537,200	1,380,700	2,856,825	5,440,044
Annual Lease (Installed base)									
(\$ thousands)									
Annual Leases		3,285	186,150	2,102,400	15,516,150	58,823,400	151,186,650	312,822,338	595,684,791
Total Upfront Fees		563	30,938	328,125	2,296,875	7,415,625	15,815,625	27,677,344	48,435,352
Annual Inverter Leases		0	0	0	0	0	0	0	0
Total Revenue		3,848	217,088	2,430,525	17,813,025	66,239,025	167,002,275	340,499,681	644,120,142
Profits & Margins on BOM									
Profit USD		2,623	190,358	2,147,025	16,015,215	60,965,080	159,756,610	327,819,768	621,930,293
Gross Margin %		68%	88%	88%	90%	92%	96%	96%	97%
SunCell Generation (TWh)	0	0	2	21	155	588	1,512	3,128	5,957
WW Electrical Demand (TWh)	28,279	28,704	29,134	29,571	30,015	30,465	30,922	31,386	31,856
SunCell % of WW Demand	0.0%	0.0%	0.0%	0.1%	0.5%	1.9%	4.9%	10.0%	18.7%

• 150kW units for demonstration phase, followed by 250kW units



### Stationary 150kW SunCell TPV – Costs & Units

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Stationary SunCell 250kW				$\overline{}$					
	Lab Unit Now	Demo Unit	Low Rate	Production	Moderate	Production		Mature	
Net Power Rating (kW DC)		150	250	250	250	250	250	250	250
SunCell rate per kWh (reference)		0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Utilization %		50%	50%	50%	50%	50%	50%	50%	50%
Upfront Fee per Unit		11,250	18,750	18,750	18,750	18,750	18,750	18,750	18,750
SunCell Lease / yr		65,700	109,500	109,500	109,500	109,500	109,500	109,500	109,500
Install Cost per Unit		3,500	3.500	3,500	3.500	3,500	3,500	3,500	3,500
Unit Cost		21,000	12,625	12,625	11,110	9,777	5,063	5,063	5,063
Total cost		24,500	16,125		14,610	13,277	8,563	8,563	8,563
Inverter rate per kWh (reference)		0	0		0	0	0	0	0
Inverter Lease / yr		0	0	0	0	0	0	0	0
% of Inverters Leased		0%	0%	0%	0%	0%	0%	0%	0%
Unit Sales & Maturity									
NA		25	500	6,000	42,000	126,000	252,000	441,000	771,750
China			50	500	3,500	17,500	87,500	153,125	267,969
EU		25	500	5,000	35,000	105,000	210,000	367,500	643,125
Rest of AP			300	2,000	14,000	42,000	84,000	147,000	257,250
Russia			0	500	3,500	10,500	21,000	36,750	64,313
India			100	-1	10,500	52,500	105,000	183,750	321,563
SA			100	-1	10,500	31,500	63,000	110,250	192,938
Rest of World			100		3,500	10,500	21,000	36,750	64,313
Annual Units		50	1,650		122,500	395,500	843,500	1,476,125	2,583,219
Cost (\$ thousands)		1,225	26,606	282,188	1,789,725	5,250,974	7,222,469	12,639,320	22,118,811

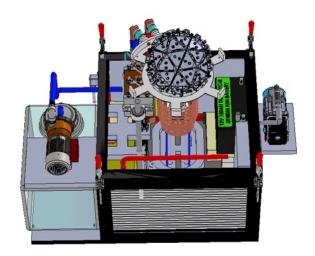
- Upfront fee of \$75 per rated power (kW)
- User lease based on 50% of net power (kW) for simplicity of terms at \$0.10 / kWh
- User that maximizes utilization can achieve \$0.05 /kW effective rate



### Stationary 250kW SunCell TPV materials cost under \$40 /kW

Stationary 250kW SunCell-TPV	Cost for Development Units	Cost for Initial Production	Cost for Mature Production
Magnet Assemblies	200	200	100
EM Pump Assemblies	100	100	50
Reactor Chamber	50	50	25
Reservoirs	30	30	15
Electrical Breaks	150	150	75
Injector Aligners	150	150	75
Structural Supports	50	50	25
Coatings	300	300	150
Tungsten Injectors	120	120	60
Tin	150	150	75
Plasma Window and Seals	200	200	100
Quartz Liner	50	100	50
PV Dense Receiver Array with Cooling	1,050	1,050	525
Controller	150	150	75
DC Vacuum Pump	500	500	250
DC Vacuum Pump Power Supply	200	200	100
DC EM Pump Power Supplies	100	100	50
DC Ignition Power Supply	200	200	100
	0	0	0
Contingency 100%, 50%, 10% by phase	3,750	1,900	190
PV Cell & Cooling Assembly Contingency \$50/kW>\$10kW	12,500	6,250	2,500
Structural Services (e.g. pad)	1,000	750	500
Total - 250 kW SunCell TPV	21,000	12,700	5,090
Per kW	84	51	20

User provided: Gas Connection or Electrolysis For Hyd.. & Oxy. Power connection for Startup Sequence Only. Inverter. Electrical Service Connection & Permits.



- SunCell is extremely cost effective relative to market value
- Contingencies included to account for development lessons learned
- PV cells have multiple paths forward to achieve cost targets



# SunCell TPV Assumptions

### • BrLP System:

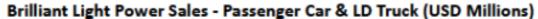
- 150kW SunCell demo unit available, working on TPV array and further refinement
- Monthly fixed rate lease
- User lease based on 50% of net power (kW) for simplicity of terms at \$0.10 / kWh
- BOM includes 50-10% production contingency
- Structural services similar to HVAC pad, with a waste heat connection
- Heat rejection radiator mounted within reasonable distance for outdoor access
- Design life 20 years
- Upfront lease payment equal to \$75 per kW
- Installation included
- Fuel source: low risk is to start with moderate pressure hydrogen and oxygen tanks (standard pressure 200bar) or lines and move to electrolyzer

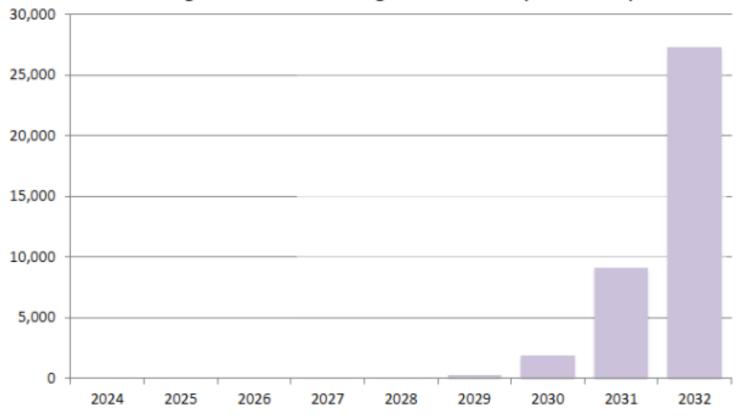
### User Responsibility

- User provides gas connection for Hydrogen and Oxygen or electrolyzer unit (BrLP planning to supply). Operating cost of hydrogen and oxygen with an electrolyzer unit is 0.5% of the power balance as parasitic load. At a hydrogen cost of \$1.5/kg, the corresponding fuel cost is \$0.0002/ kWh
- Engineering & permits
- Inverter by user, BrLP is considering optional inverter with a partner
- Electrical services interface with user's distribution panel
- User provides electrical connection for initial startup. Optional price for BrLP to provide high energy short duration startup capacitor bank



# SunCell TPV for passenger car market has significant revenue at modest share of TAM





SunCell Units	0	0	0	100	1,299	12,985	129,851	649,254	1,947,761
% TAM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	2.2%



# SunCell Sales Estimates – Passenger Cars and LD Trucks

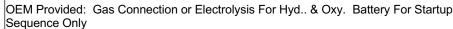
150kW SunCell Car / LD Truck	2024	2025	2026	2027	2028	2029	2030	2031	2032
				Demo Unit	Low Rate F	Production	Moderate	Production	Mature
Net Power Rating (kW DC)				150	150	150	150	150	150
Unit Cost				15,000	9,450	9,450	7,088	5,316	3,590
Cost per kW				100	63	63	47	35	24
Unit Sales & Maturity									
Passenger Cars				50	1,000	10,000	100,000	500,000	1,500,000
LD Trucks				50	299	2,985	29,851	149,254	447,761
Annual Units				100	1,299	12,985	129,851	649,254	1,947,761
Annual Cost (\$ thousands)				1,500	12,271	122,709	920,317	3,451,189	6,992,463
Cumulative Units									
				50	4.050	44.050	444.050	844.050	2444.050
Passenger Cars					1,050	11,050	111,050	611,050	2,111,050
LD Trucks Installed Units				50 100	349 1,399	3,334 14,384	33,184 144,234	182,438 793,488	630,199 2,741,249
installed Onts				100	1,000	17,307	177,207	100,700	2,171,270
Annual Revenue (\$ thousan	dsl								
Price per Sun Cell Unit				20,000	17,000	17,000	14,000	14,000	14,000
Passenger Cars				1.000	17,000	170,000	1,400,000	7.000.000	21,000,000
LD Trucks				1,000	5,075	50.746	417.910	2.089.552	6,268,657
Total Revenue				2,000	22,075	220,746	1,817,910	9,089,552	27,268,657
Profits & Margins									
Profit USD				500	9,804	98,037	897,593	5,638,363	20,276,194
Gross Margin %				25.0%	44.4%	44.4%	49.4%	62.0%	74.4%
*									
Car & LD Truck Production	87,300,000	87,300,000	87,300,000	87,300,000	87,300,000	87,300,000	87,300,000	87,300,000	87,300,000
SunCell % of TAM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	2.2%

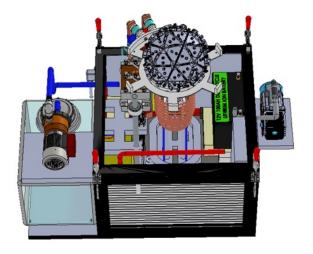
• SunCell CPV development units in 2026 for work with OEMs



# Attractive unit economics improve with scale

Mobile 150kW SunCell-TPV	Cost for Development	Cost for Initial	Cost for Mature
	Units	Production	Production
Magnet Assemblies	200	200	100
EM Pump Assemblies	100	100	50
Reactor Chamber	50	50	25
Reservoirs	30	30	15
Electrical Breaks	150	150	75
Injector Aligners	150	150	75
Structural Supports	50	50	25
Coatings	300	300	150
Tungsten Injectors	120	120	60
Tin	150	150	75
Plasma Window and Seals	200	200	100
Quartz Liner	50	100	50
PV Dense Receiver Array with Cooling	1,050	1,050	525
Controller	150	150	75
DC Vacuum Pump	500	500	250
DC Vacuum Pump Power Supply	200	200	100
DC EM Pump Power Supplies	100	100	50
DC Ignition Power Supply	200	200	100
	0	0	0
Contingency 100%, 50%, 10% by phase	3,750	1,900	190
PV Cell & Cooling Assembly Contingency \$50/kW>\$10kW			
	7,500	3,750	1,500
Total	15,000	9,450	3,590
Per kW	100	63	24





- Initial production systems in 2026 with OEM partnership to test
- PV cells using single junction concentrator cells with light recycling having low-cost potential and high efficiency



### Passenger Car Market Assumptions

- Car markets will have SunCells available in 150 kW power range
- Target markets are passenger cars and light duty trucks in high annual mileage regions.
- Strong value for weight savings, range improvement, and operating costs
- Automotive market entry is separate from business model for other BrLP segments. Direct sales to OEM and platform integrators
- OEM purchases SunCell-TPV
- SunCell is restricted to the initial car / light duty truck. There is no removal for secondary use (e.g. standby power) or power generations
- Majority of world-wide requirements are under 150kW (Toyota Corolla 103kW, VW Golf 81kW).



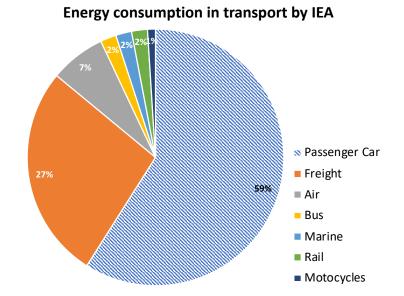
### System Cost Assumptions

- SunCell DC output, OEM provides converter
- Structure modifications to packaging for mobile use
- Heat Rejection Radiator responsibility of OEM, but BrLP provides controls and pumps
- Controls upgraded electronics and software for motive environment
- Life design life 20 years
- Fuel source: low risk is to start with small moderate pressure hydrogen tank and 1% scale oxygen tank and move to water electrolyzer wherein either of standard 6 liter H<sub>2</sub> tank at a pressure of 200 bar or 1 liter water provides a 2000-mile range.
- OEM provides high energy short duration startup capacitor bank (25kW for less than 25 seconds)



### Other Motive will extend the SunCell's impact

# Follow-on Motive Markets Freight: HD/MD Truck\* Bus Marine Rail Aerospace – General Aviation 1st

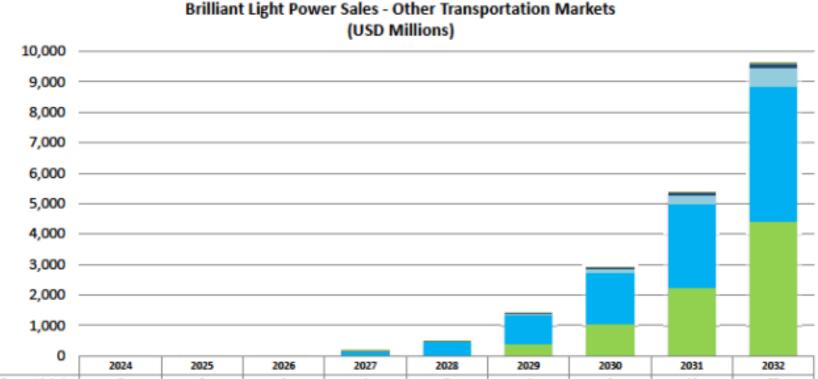


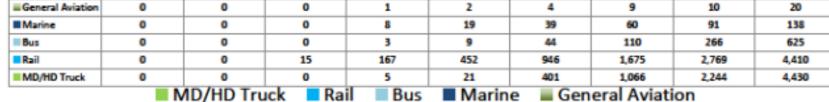
- These will follow key markets: Thermal, Stationary and Passenger Car
- Unlike Passenger Car, these markets are planned to be a "Lease only" model which provides power at a fixed annual or monthly rate.
- BrLP has the ability to leverage core SunCell TPV, with modular configurations, to meet unique power and market needs
- For example, a 4,000 hp (or 3MW) diesel locomotive engine can be replaced by paralleling 20 SunCell units

\* Medium Duty (MD), Heavy Duty (HD) Trucks



# Other Motive markets have strong environmental forces to adopt the SunCell







# SunCell Combined Financial Projections

USD millions	2025	2026	2027	2028	2029	2030	2031	2032
BRLP Net Revenue								
Stationary Power SunCell								
TPV	4	217	2,431	17,813	66,239	167,002	340,500	644,120
YoY Change		5542%	1020%	633%	272%	152%	104%	89%
% TAM	0.0%	0.0%	0.1%	0.5%	1.9%	4.9%	10.0%	18.7%
Thermal SunCell TPV	_	34	1,487	6,876	28,394	59,035	104,701	174,188
YoY Change			4302%	362%	313%	108%	77%	66%
% TAM		0.0%	0.1%	0.3%	1.1%	2.4%	4.2%	6.8%
Car/LD Truck Suncell TPV		-	2	22	221	1,818	9,090	27,269
YoY Change				1004%	900%	724%	400%	200%
% TAM			0.0%	0.0%	0.0%	0.1%	0.7%	2.2%
Other Motive Suncell TPV	_	15	182	502	1,430	2,912	5,370	9,602
YoY Change		-	1083%	176%	185%	104%	84%	79%
% TAM			0.1%	0.2%	0.6%	1.1%	1.9%	3.2%
Total Net Revenue	4	266	4,102	25,213	96,284	230,767	459,661	855,179
YoY Change		6820%	1441%	515%	282%	140%	99%	86%
% TAM	0.0%	0.0%	0.1%	0.3%	1.3%	3.1%	6.2%	11.4%
Gross Profit								
Stationary Power SunCell								

Gross Profit								
Stationary Power SunCell								
TPV	3	190	2,147	16,015	60,965	159,757	327,820	621,930
Thermal SunCell TPV	_	28	1,321	6,245	26,453	56,852	102,465	170,833
Car/LD Truck Suncell TPV	_	_	1	10	98	898	5,638	20,276
Other Motive Suncell TPV	-	15	143	442	1,137	2,423	4,657	8,651
Total Profit	3	234	3,612	22,711	88,653	219,929	440,580	821,691
YoY Change		8805%	1447%	529%	290%	148%	100%	87%
Gross Margin %	68%	88%	88%	90%	92%	95%	96%	96%



### Key Investment Highlights

- Massive addressable markets applications to displace virtually all energy sources
- Working prototype creating net positive energy at commercial scale
- Independently validated operation, science, theory, power output, & engineering
- Zero carbon emissions or other pollutants (100% clean energy)
- Superior energy density and economics to other energy sources (+40x- 220x)
- Global patent portfolio protects leading technology position



















# SunCell TPV offers great value for MD/HD Truck market

Truck MD/HD SunCell TPV	2024	2025	2026	2027	2028	2029	2030	2031	2032
				Demo Unit	Low Rate P	roduction	Moderate F	roduction	Mature
Net Power Rating (kW DC)				300	300	300	300	300	300
Avg. km per year				130,000	130,000	130,000	130,000	130,000	130,000
\$ per km				0.15	0.15	0.15	0.15	0.15	0.15
SunCell Lease \$ / yr				20,000	20,000	20,000	20,000	20,000	20,000
Upfront Fee 2x150kW				30,000	18,900	18,900	14,175	10,631	7,180
Unit Cost 2x150kW				30,000	18,900	18,900	14,175	10,631	7,180
Cost per kW				100	63	63	47	35	24
Unit Sales & Maturity									
MD/HD Truck				100	500	10,000	25,000	50,000	100,000
Annual Units				100	500	10,000	25,000	50,000	100,000
Annual Cost (\$ thousands)				3,000	9,450	189,000	354,375	531,563	718,000
Installed Base									
Cummulative Units				100	600	10,600	35,600	85,600	185,600
Annual Lease (Installed base)									
(\$ thousands)									
Lease Payments				2,000	12,000	212.000	712.000	1.712.000	3,712,000
Total Upfront Fees				3,000	9,450	189,000	354,375	531,563	718,000
Total Revenue				5,000	21,450	401,000	1,066,375	2.243,563	4,430,000
Profits & Margins									
Profit USD				2,000	12,000	212,000	712,000	1,712,000	3,712,000
Gross Margin %				40%	56%	53%	67%	76%	84%
<u> </u>									
MD/HD Truck Production	3,361,060	3,465,253	3,572,676	3,683,429	3,797,615	3,915,341	4,036,717	4,161,855	4,290,872
SunCell % of TAM Production		0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	1.2%	2.3%

• For transportation market, trucks are the #2 energy use after cars



### MD/HD Truck System & Market Assumptions

### System

- Truck SunCell TPVs will be 2 paralleled 150kW units for 300kW total. Options for other levels – 250kW
- Life design life 20 years
- Fuel source: option to use moderate pressure hydrogen tank and 1% scale oxygen tank or directly from water electrolyzer
- Vehicle end of life, the SunCell reverts to BrLP
- SunCell 300kW is baseline system with lease at \$20,000 per year
- OEM provides high energy short duration startup capacitor bank
- No inverter, vehicle OEM provides any conversion
- Heat rejection radiator responsibility of OEM, but BrLP provides controls and pumps

### Market

- #2 energy consumer in transportation
- 3.2M MD/HD trucks produced in 2019 worldwide
- Typical global HD truck consumes \$39,000 in diesel fuel per year
- Initial entry withe high annual mileage applications (e.g. long distance freight)
- Demo units commence in 2026, after SunCell TPV for Passenger Car and Stationary markets
- Typical engine is 300 kW





## Rail Engines using SunCell TPV is attractive "smaller" segment

Rail 150kW SunCell TPV	2024	2025	2026	2027	2027	2028	2029	2030	2031
			Demo Unit		Low Rate Production		Moderate Production		Mature
Net Power Rating (kW DC)			150	150	150	150	150	150	150
SunCell rate per kWh			0.10	0.10	0.10	0.10	0.10	0.10	0.10
Utilization %			50%	50%	50%	50%	50%	50%	50%
SunCells per Locomotive Engin	ie		20	20	20	20	20	20	20
SunCell Upfront Fee			11,250	11,250	11,250	11,250	11,250	11,250	11,250
SunCell Lease / yr			65,700	65,700	65,700	65,700	65,700	65,700	65,700
Engine Upfront Fee			225,000	225,000	225,000	225,000	225,000	225,000	225,000
Engine SunCell Lease / yr			1,314,000	1,314,000	1,314,000	1,314,000	1,314,000	1,314,000	1,314,000
SunCell Unit Cost			0	15,000	9,450	9,450	7,088	5,316	3,590
Total Engine unit Cost			0	300,000	189,000	189,000	141,750	106,313	71,800
Unit Sales & Maturity									
Engines			10	100	200	350	525	788	1,181
Annual Units			10	100	200	350	525	788	1,181
Cost (\$ thousands)			0	30,000	37,800	66,150	74,419	83,721	84,814
Installed Base									
Installed Cummulative Units			10	110	310	660	1,185	1,973	3,154
Annual Lease (Installed base)								I	- 1
(\$ thousands) Annual Leases			12 140	144 540	407.240	087 240	4 557 000	2 504 085	4 444 020
			13,140	144,540	407,340	867,240	1,557,090	2,591,865	4,144,028
Total Upfront Fees			2,250	22,500	45,000	78,750	118,125	177,188	265,781
Total Revenue			15,390	167,040	452,340	945,990	1,675,215	2,769,053	4,409,809
Profits & Margins			45 200	437.040	444.540	070 040	4 000 700	2 005 224	4 224 005
Profit USD			15,390 100%	137,040 82%	414,540	879,840	1,600,796	2,685,331	4,324,995
Gross Margin %			100%	82%	92%	93%	96%	97%	98%



### Rail Engine System & Market Assumptions

### System

- 150kW SunCell TPV units are operated in paralleled for higher power requirements (20 units = 3.0MW)
- Life design life 20 years
- Fuel source: option to use moderate pressure hydrogen tank and 1% scale oxygen tank or directly from water electrolyzer
- OEM provides high energy short duration startup capacitor bank
- Demo units commence in 2026, after SunCell TPV for Passenger Car and Stationary markets

### Market

- Locomotive is a long life (20+ years), capital asset with high environmental impact
- The rail sector used close to 2,150 PJ of energy in 2015, mostly provided by oil and electricity
- Locomotive engines orders average 6,000 units / yr.
- Typical engine power is 2.0MW to 3.2MW (4,440hp)





## Bus & Coach market leverages Truck solutions

Bus & Coach SunCell TPV	2024	2025	2026	2027	2028	2029	2030	2031	2032
			Demo Unit	Low Rate Production		Moderate Production		Mature	
Net Power Rating (kW DC)				300	300		300	300	300
Avg. km per year				65,000	65,000		65,000	65,000	65,000
\$ per km				0.31	0.31	0.31	0.31	0.31	0.31
SunCell Lease \$ / yr				20,000	20,000	20,000	20,000	20,000	20,000
Upfront Fee 2x150kW				30,000	18,900	18,900	14,175	10,631	7,180
Unit Cost 2x150kW				30,000	18,900	18,900	14,175	10,631	7,180
Cost per kW				100	63	63	47	35	24
Unit Sales & Maturity									
Bus				50	200	1,000	2,500	6,250	15,625
Annual Units				50	200	1,000	2,500	6,250	15,625
Annual Cost (\$ thousands)				1,500	3,780		35,438	66,445	112,188
Installed Base									
Cumulative Units				50	250	1,250	3,750	10,000	25,625
Annual Lease (Installed base)									
(\$ thousands)									
Lease Payments				1,000	5,000	25,000	75,000	200,000	512,500
Total Upfront Fees				1,500	3,780		35,438	66,445	112,188
Total Revenue				2,500	8,780	43,900	110,438	266,445	624,688
Profits & Margins									
Profit USD				1,000	5,000	25,000	75,000	200,000	512,500
Gross Margin %				40%	57%	57%	68%	75%	82%
Bus & Coach Production	292,680	316,094	341,382	368,693	398,188	430,043	464,446	501,602	541,730
SunCell % of TAM Production	202,000	0.0%	0.0%		0.1%	0.2%	0.5%	1.2%	2.9%

 A market segment very focused on environmental solutions with strong government support



### Bus & Coach System & Market Assumptions

### System

- Bus SunCell TPVs will be 2 paralleled 150kW units for 300kW total.
- Life design life 20 years
- Fuel source: option to use moderate pressure hydrogen tank and 1% scale oxygen tank or directly from water electrolyzer
- Vehicle end of life, the SunCell reverts to BrLP
- SunCell 300kW is baseline system with lease at \$20,000 per year
- OEM provides high energy short duration startup capacitor bank
- No inverter, vehicle OEM provides any conversion
- Heat rejection radiator responsibility of OEM, but BrLP provides controls and pumps

#### Market

- 271,000 units produced in 2019
- Outstanding market fit for SunCell over diesel or batteries by providing more range, less weight and no emissions.
- Typical bus consumes \$21,000 in diesel fuel per year
- Initial entry for city buses and long distance coaches
- Demo units commence in 2026, after SunCell TPV for Passenger Car and Stationary markets
- Typical engine is 300kW





### Marine market needs the SunCell for environmental solution

Marine SunCell	2024	2025	2026	2027	2028	2029	2030	2031	2032
				Demo Unit	Low Rate	Production	Moderate Production		Mature
Net Power Rating (kW DC)				300	300	300	300	300	300
SunCell Lease / yr				20,000	20,000	20,000	20,000	20,000	20,000
Upfront Fee per Unit				30,000	18,900	18,900	14,175	10,631	7,180
Unit Cost				30,000	18,900	18,900	14,175	10,631	7,180
Cost per kW				100	63	63	47	35	24
Unit Sales & Maturity									
Propulsion				50	100	200	350	525	788
Aux Gen Set				100	400	800	1,400	2,450	4,288
Annual Units				150	500	1,000	1,750	2,975	5,075
Annual Cost (\$ thousands)				4,500	9,450	18,900	24,806	31,628	36,439
Installed Base									-
Propulsion				50	100	200	350	525	788
Aux Gen Set				100	400	800	1,400	2,450	4,288
Cumulative Units				150	500	1,000	1,750	2,975	5,075
Annual Lease (Installed base									
(\$ thousands)	*								- 1
Propulsion				1,000	2,000	4,000	7,000	10,500	15,750
Aux Gen Set				2,000	8,000	16,000	28,000	49,000	85,750
Lease Payments				3,000	10,000	20,000	35,000	59,500	101,500
Total Upfront Fees				4,500	9,450	18,900	24,806	31,628	36,439
Total Revenue				7,500	19,450	38,900	59,806	91,128	137,939
Profits & Margins									
Profit USD				3,000	10,000	20,000	35,000	59,500	101,500
Gross Margin %				40%	51%	51%	59%	65%	74%
SunCell Ship Orders MW			0	45	150	300	525	893	1,523
Annual Ship Orders MW			9,540	9,540	9,540	9,540	9,540	9,540	9,540
SunCell % of Order MW			0.0%	0.5%	1.6%	3.1%	5.5%	9.4%	16.0%



### Marine System & Market Assumptions

### System

- Marine SunCell TPVs will be 2 paralleled 150kW units for 300kW total.
- Life design life 20 years
- Fuel source: directly from water electrolyzer
- SunCell 300kW is baseline system with lease at \$20,000 per year
- OEM provides high energy short duration startup power supply
- No inverter, ship builder provides any conversion

### Market

- Averaged propulsion orders are around 9,540 MW per year
- Auxiliary generators, essential for container refrigeration, increase MW demand
- Ship life is 25 years
- SunCell provides a unique, differentiated solution for Marine
- Ship power plant conversions are possible, but not a focus area.





### Aerospace electrification saves 90% of fuel costs

Aerospace SunCell	2024	2025	2026	2027	2028	2029	2030	2031	2032
•				Demo Un	It Ground				
					Demo Ur	nit Flight		_	
						Flight	Testing		
General Aviation								Low Rate	Production
Net Power Rating (kW DC)			250	250	250	250	250	250	
SunCell Lease / yr				8,000	8,000	8,000	8,000	8,000	
Upfront Fee per Unit				80,000	80,000	80,000	80,000	80,000	80,000
Unit Cost				20,000	11,950	11,950	8,963	6,722	4,590
Cost per kW				80	48	48	36	27	18
Unit Sales & Maturity									
Annual Units				10	20	40	100	100	200
Annual Cost (\$ thousands)				200	239	478	896	672	918
Installed Base									
Cumulative Units				10	30	70	170	270	470
Annual Lease (Installed base)									
(\$ thousands)									
Lease Payments				80	240	560	1,360	2,160	
Total Upfront Fees				800	1,600	3,200	8,000	8,000	
Total Revenue				880	1,840	3,760	9,360	10,160	19,760
Profits & Margins									
Profit USD				680	1,601	3,282	8,464	9,488	18,842
Gross Margin %				77%	87%	87%	90%	93%	95%
SunCell GA Orders MW			0	3	5	10	25	25	50
Annual GA Aicraft			2,324	2,324	2,324	2,324	2,324	2,324	
Annual GA Aicraft MW @250kW	1		581	581	581	581	581	581	581
SunCell % of Order MW			0.0%	0.4%	0.9%	1.7%	4.3%	4.3%	8.6%

• General Aviation provides entry for electrification. SunCell has very unique Aerospace value for weight and cost savings.



### Aerospace Assumptions

### System

- Aerospace SunCell TPVs will be 250kW unit for General Aviation (GA)
- Life design life 20 years
- Fuel source: directly from water electrolyzer or hydrogen tank
- SunCell 250kW is baseline system with lease at \$8,000 per year for GA use
- Upfront payment \$80,000 per aircraft
- OEM provides startup power supply and surge power battery system
- No inverter, OEM provides any conversion

### Market

- Active GA Aircraft 213,050 in US
- New builds 2,324
- GA jet fuel consumption 1,535M gallons or \$3.8B (\$2.46 / gallon) or \$18K fuel / aircraft.
- Typical Cessna engine \$27-50K with battery systems in development >\$80K



SunCell offers significantly lower weight vs fuel or battery







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