

# ***EU Corporate Sustainability Reporting Directive and Zero Carbon Roadshow***

With  **VIVID  
EDGE**



More is possible



# Setting the Scene – The Perfect Storm



**Geopolitical issues**

**Escalating Energy Cost**

\* Fossil fuel dependency

**Energy Security**

- Supply V Demand
- Infrastructure
- Renewables

**Depletion of natural resources**

**Social issues and**

**Climate Change**

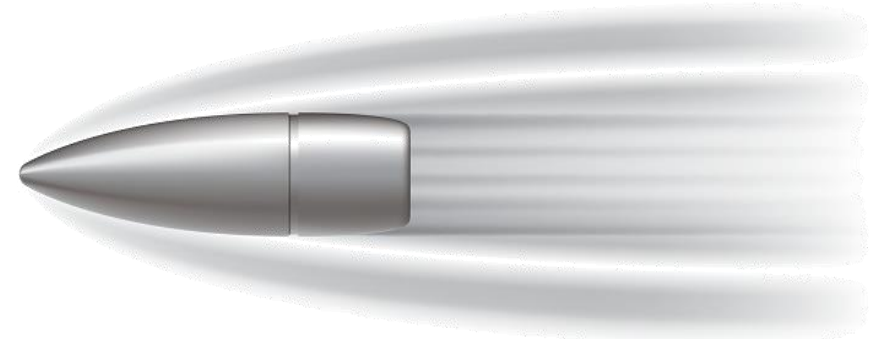
**Climate Change Is Accelerating, Bringing the World 'Dangerously Close' to Irreversible Change**

# Clean Energy Future - Energy Efficiency

Renewable energy brings huge benefits for the climate, public health & the global economy however ...  
Energy efficiency remains the cheapest, and often the most immediate way to reduce the use of carbon intensive fossil fuels.

1. Less energy to perform the same task
2. Not be as cool as the renewable sector but very much as important
  - Reduces GHG emissions,
  - Reduces energy imports,
  - Reduces operating costs
3. Reduces pressure on the grid
4. Facilitates a smoother transition to renewables.
5. Reduces pressure to build further generating capacity..

Energy Efficiency is the closest thing we have to a “Silver Bullet”



# Your energy efficiency journey!

For energy consumers, improving energy efficiency can feel impossible particularly where investment is concerned.

## Why?

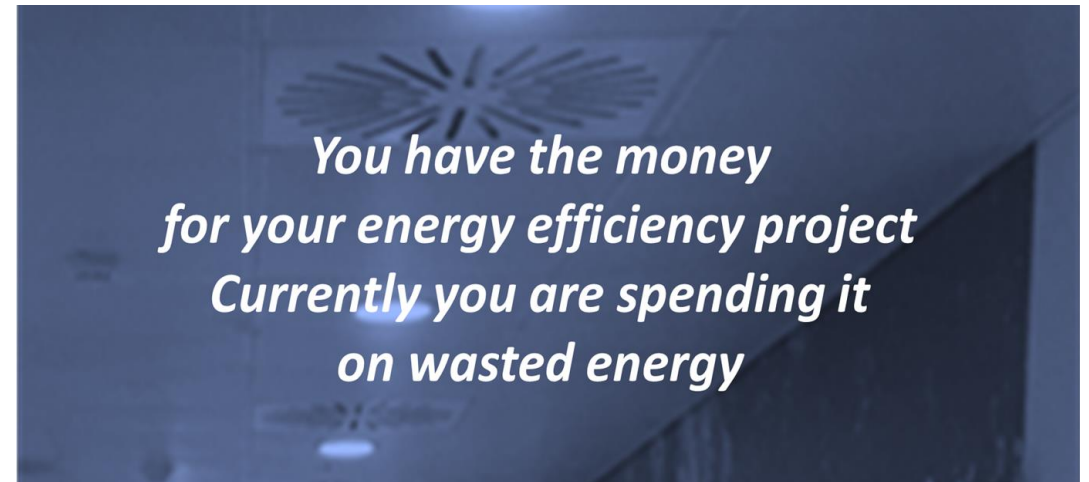
1. Other priorities for their capital or simply capital limitations.
2. Fear of the unknown .. Risk
3. If it's not broken don't fix it.
4. Investment challenges.. Payback thresholds
5. Burden of proof.
6. Some energy efficiency measures take time before results are evident.

Capital limitations tends to be #1 challenge!



# Energy Efficiency Enablers

- Many organisations still cite capital limitations or other priorities when it comes to investment!
- Until now, limited access to commercial financing has long been recognised by experts to be one of the major barriers to implementing energy projects
- AND traditionally, end users can “close down” the minute “funding” or “financing” is mentioned
- Financing IS NOT and SHOULD NOT be a barrier!
- Modern-day finance has evolved and is now an enabler of cleantech solutions.



- Cost of Funds typically range from high single digits to low double digits (~7 – 15%) depending on amount and risk.
- Energy Savings typically range anywhere from 5 – 50% (up to 85% for LED migrations)
- Energy inflation ... You tell me
- If you don't have the capital - **CONSIDER OTHER ENABLERS**



# What we do...



Vivid Edge uses its “Energy as a Service” to accelerate the transition to sustainability for organisations.

From a CSRD perspective, we can enable some Scope 3 enhancements in addition to Scope 1&2 energy related measures.

We turn “Capex into Opex”



# Energy as a Service (EaaS)

- Can easily cater for RE Projects but places emphasis on “Energy Efficiency first”
- We pay for the entire project upfront and charge back “as a Service”
- The Client only starts paying after the project is installed
- Considered measure (or suite of measures) should either
  - Reduce energy consumption and associated emissions
  - Reduce/recover energy waste
  - Improve resource efficiency
  - Increase operating efficiency – i.e. more widgets/kWh
  - Compliment the transition to renewables e.g. Storage/Grid services etc.
- Technology agnostic – You choose your tech. We check it!
- Due diligence includes
  - Technical assessments
  - Design review
  - Business case assessment
  - Credit checks



The “Energy as Service” model is the new “Spotify for Cleantech”.

# The problem we solve...



Commercial organisations can waste up to **40%** of their energy consumed due to inefficient buildings and equipment



Improvement requires non-core expertise in energy efficiency



Limited capital and time often prioritised for core activities



Energy performance contracts can be costly, cumbersome, and time consuming to manage.





# Reduce grid demand

Includes rooftop solar, EV charging infrastructure, and equipment retrofits



Estimated % Energy Savings Range  
for a typical building 8+ years old

Boiler Retrofit	15% - 25%
Chiller Retrofit	20% - 30%
Free Cooling	15% - 65%
Heat Recovery	10% - 25%
HVAC Upgrade	20% - 50%
LED Retrofits	50% - 85%
VSD/Invertors	15% - 50%
Envelope	5% - 50%
Energy-efficient district heating or cooling	10% - 25%

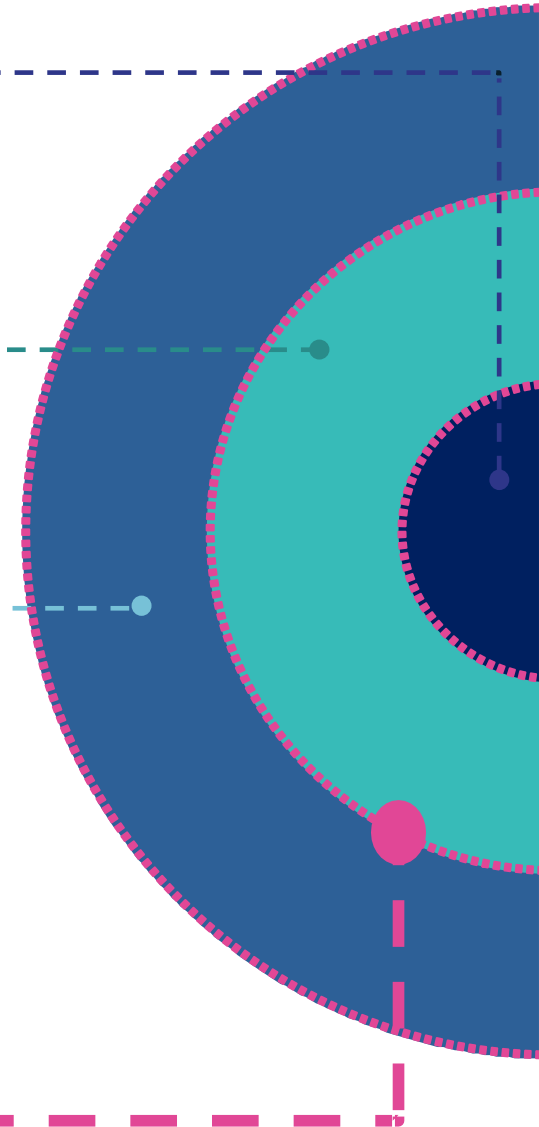
# What you get...

A faster and easier  
journey to net zero

Portfolio-wide delivery of efficiency  
upgrades - including delivery,  
maintenance, funding and a performance  
guarantee  
for a fixed monthly fee; no repayments  
until benefits commence

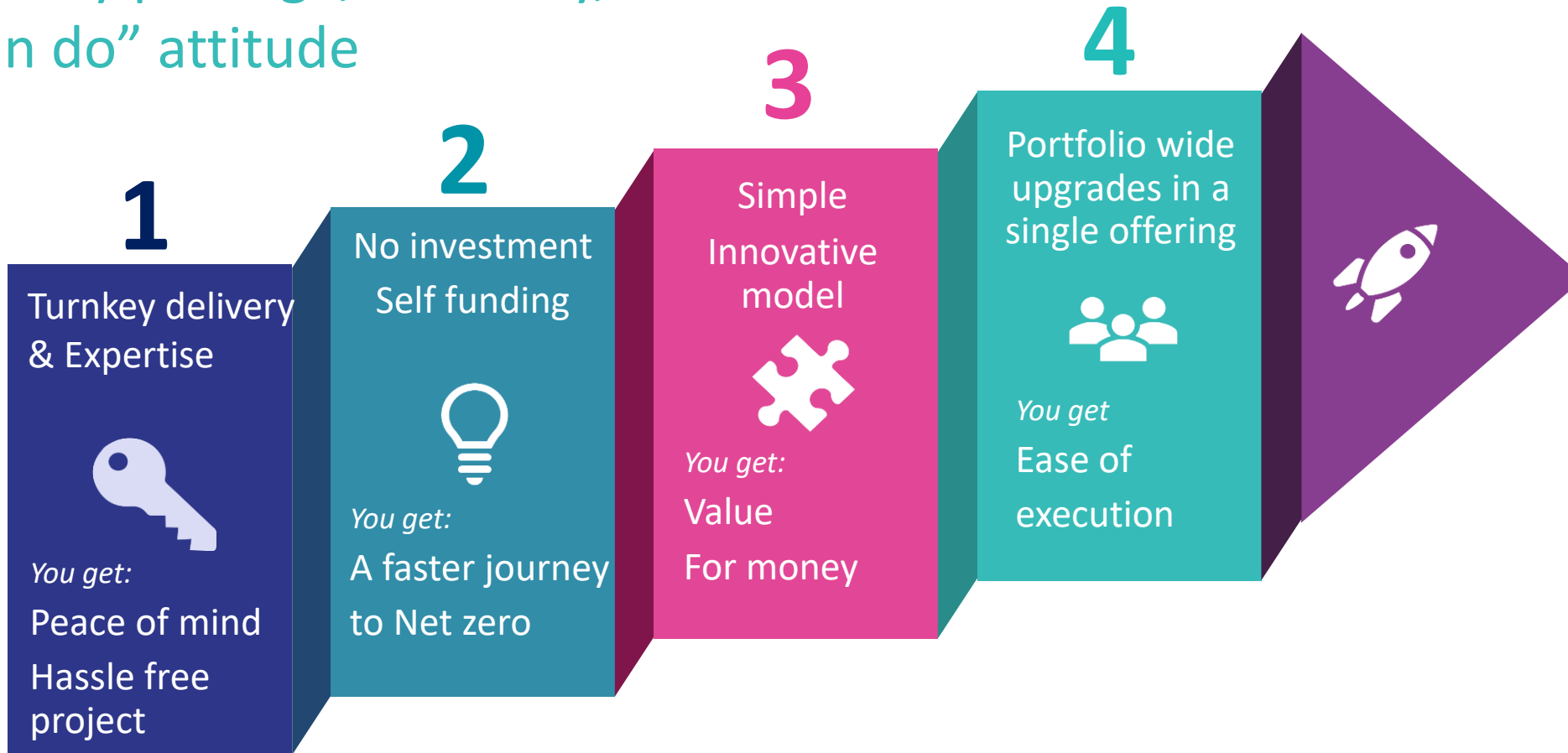
Save energy and cut costs, reaching your  
carbon reduction targets faster with less  
effort and no capital requirement

We take the risk and  
hassle away, so...  
**more is possible!**



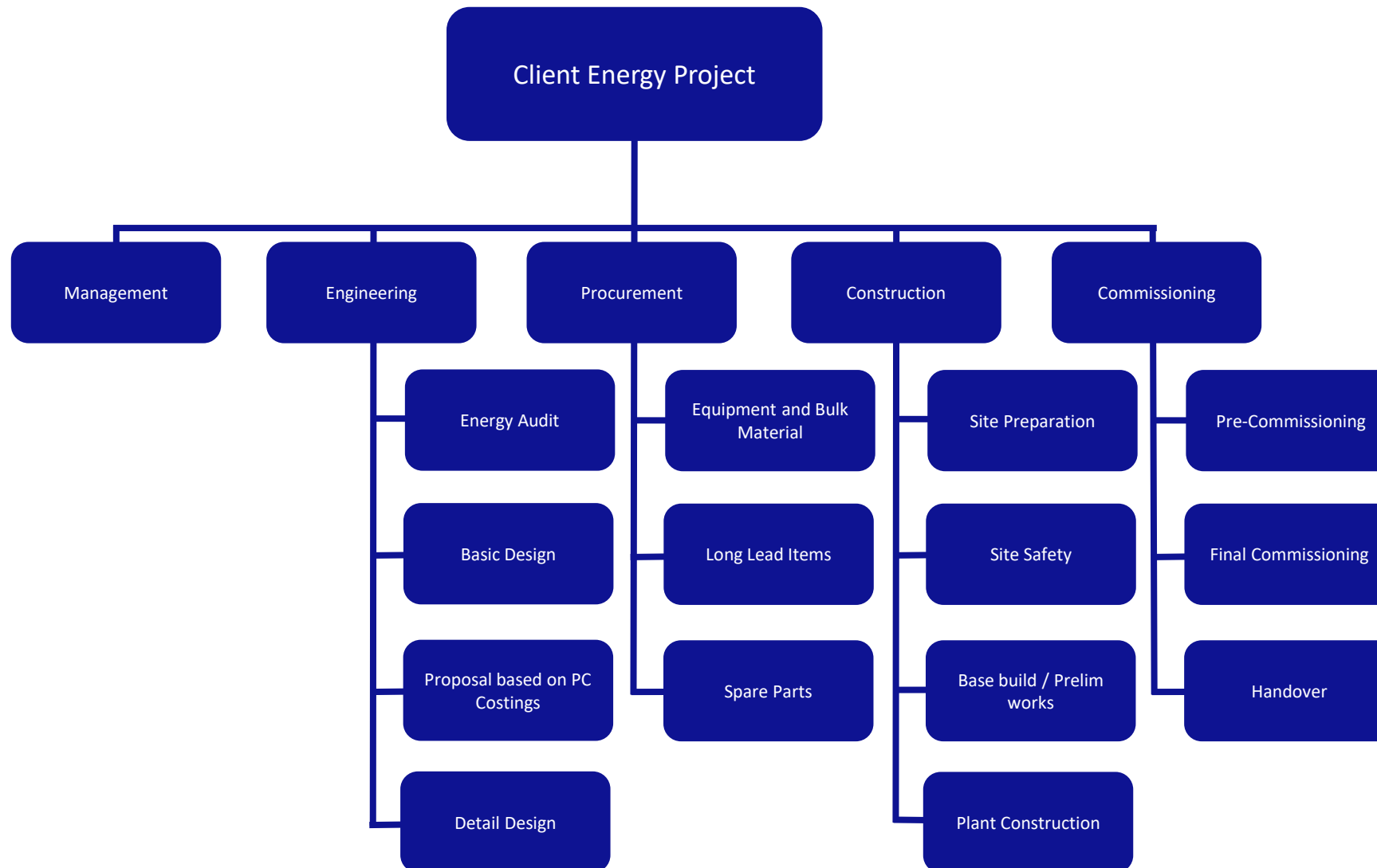
# Our Edge

Customers love our technical expertise, turnkey package, flexibility, & “can do” attitude



We make it easier for you to reduce your carbon footprint.

# We turn this

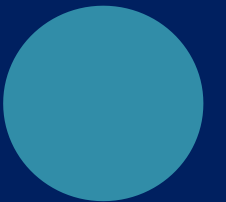
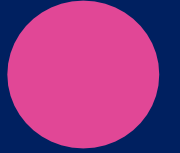


# Into this





# Vivid Edge Case Study







# VE Bundled Solution Case Study

**Scope:** Projects considers a suite of measures combined that include Lighting, Boiler retrofit/Heat pumps, Chillers retrofit, Roof mounted Solar and other measures all captured under a single “energy as a service” offering. Client had an intention to execute over a 7-year period.

## Notes & Assumptions

- We assumed a conservative base rate of €0.20/kWh<sub>e</sub> and €0.08/kWh<sub>ng</sub> ...  
**Fiscal saving projections are understated.**
- Operating hours set to increase by 22% therefore annual savings will increase with no increase in service charge ... **Client retains all upside.**
- Maintenance Savings are based on historic costs ...
- Site has limited operating redundancy. Multiple “single points of failure”.
- Whilst standard warranties vary from 2 – 7 years (with exception to Solar), the Vivid Edge “Energy as a Service” essentially **warrants performance for the full service term** ...
- Service Terms are generally 10 years with exception to Solar PV where two Options (10 Years and 15 Years) are available ...
- Emission factor applied at time of analysis 0.346 kgCO<sub>2</sub>/kWh<sub>e</sub> and 0.204 kgCO<sub>2</sub>/kWh<sub>ng</sub> ...

# EEM 01 - Lighting Upgrade – Life Cycle Analysis



Year	Energy Savings	AUP	Est Client Maintenance Savings	Client Annual Savings (Gross)	Cumulative Savings (Gross)	Emissions Factor	Emissions	VE Service Charge	Client Annual Savings (Net)	Cumulative Savings (Net)
Year 1	126,765 kWh	€0.2000	€3,387	€28,740	€28,740	0.346 kgCO <sub>2</sub> /kWh	44 TCO <sub>2</sub>	-€23,041	€5,700	€5,700
Year 2	126,765 kWh	€0.2060	€3,472	€29,585	€58,326	0.341 kgCO <sub>2</sub> /kWh	43 TCO <sub>2</sub>	-€23,041	€6,545	€12,244
Year 3	126,765 kWh	€0.2122	€3,559	€30,456	€88,781	0.336 kgCO <sub>2</sub> /kWh	43 TCO <sub>2</sub>	-€23,041	€7,415	€19,659
Year 4	126,765 kWh	€0.2185	€3,648	€31,351	€120,133	0.330 kgCO <sub>2</sub> /kWh	42 TCO <sub>2</sub>	-€23,041	€8,311	€27,970
Year 5	126,765 kWh	€0.2251	€3,739	€32,274	€152,406	0.326 kgCO <sub>2</sub> /kWh	41 TCO <sub>2</sub>	-€23,041	€9,233	€37,204
Year 6	126,765 kWh	€0.2319	€3,832	€33,223	€185,630	0.321 kgCO <sub>2</sub> /kWh	41 TCO <sub>2</sub>	-€23,041	€10,183	€47,386
Year 7	126,765 kWh	€0.2388	€3,928	€34,201	€219,831	0.316 kgCO <sub>2</sub> /kWh	40 TCO <sub>2</sub>	-€23,041	€11,160	€58,547
Year 8	126,765 kWh	€0.2460	€4,026	€35,207	€255,038	0.311 kgCO <sub>2</sub> /kWh	39 TCO <sub>2</sub>	-€23,041	€12,167	€70,713
Year 9	126,765 kWh	€0.2534	€4,127	€36,243	€291,281	0.306 kgCO <sub>2</sub> /kWh	39 TCO <sub>2</sub>	-€23,041	€13,203	€83,916
Year 10	126,765 kWh	€0.2610	€4,230	€37,310	€328,591	0.302 kgCO <sub>2</sub> /kWh	38 TCO <sub>2</sub>	-€23,041	€14,269	€98,186
Year 11	126,765 kWh	€0.2688	€4,336	€38,408	€366,999	0.297 kgCO <sub>2</sub> /kWh	38 TCO <sub>2</sub>	€0	€38,408	€136,594
Year 12	126,765 kWh	€0.2768	€4,444	€39,539	€406,538	0.293 kgCO <sub>2</sub> /kWh	37 TCO <sub>2</sub>	€0	€39,539	€176,132
Year 13	126,765 kWh	€0.2852	€4,555	€40,703	€447,241	0.288 kgCO <sub>2</sub> /kWh	37 TCO <sub>2</sub>	€0	€40,703	€216,835
Year 14	126,765 kWh	€0.2937	€4,669	€41,901	€489,142	0.284 kgCO <sub>2</sub> /kWh	36 TCO <sub>2</sub>	€0	€41,901	€258,736
Year 15	126,765 kWh	€0.3025	€4,786	€43,135	€532,276	0.280 kgCO <sub>2</sub> /kWh	35 TCO <sub>2</sub>	€0	€43,135	€301,871
Year 16	126,765 kWh	€0.3116	€4,906	€44,405	€576,681	0.276 kgCO <sub>2</sub> /kWh	35 TCO <sub>2</sub>	€0	€44,405	€346,275
Year 17	126,765 kWh	€0.3209	€5,028	€45,712	€622,393	0.272 kgCO <sub>2</sub> /kWh	34 TCO <sub>2</sub>	€0	€45,712	€391,988
Year 18	126,765 kWh	€0.3306	€5,154	€47,059	€669,452	0.267 kgCO <sub>2</sub> /kWh	34 TCO <sub>2</sub>	€0	€47,059	€439,046
Year 19	126,765 kWh	€0.3405	€5,283	€48,445	€717,896	0.263 kgCO <sub>2</sub> /kWh	33 TCO <sub>2</sub>	€0	€48,445	€487,491
Year 20	126,765 kWh	€0.3507	€5,415	€49,871	€767,768	0.259 kgCO <sub>2</sub> /kWh	33 TCO <sub>2</sub>	€0	€49,871	€537,362
<b>Totals</b>	<b>2,535,295 kWh</b>			<b>€767,768</b>			<b>762 TCO<sub>2</sub></b>		<b>€537,362</b>	<b>€537,362</b>

Energy Savings

CO<sub>2</sub> Avoided

Client Upside

# EEM 02 - Chiller Retrofit – Life Cycle Analysis



Year	Energy Savings	Saving Degradation	AUP	Est Client Maintenance Savings	Client Annual Savings (Gross)	Cumulative Savings (Gross)	Maintenance Cost	Emissions Factor	Emissions	VE Service Charge	Client Annual Savings (Net)	Cumulative Savings (Net)
Year 1	149,314 kWh	-0.50%	€0.2000	€7,500	€37,363	€37,363	€0	0.346 kgCO <sub>2</sub> /kWh	52 TCO <sub>2</sub>	-€30,680	€6,683	€6,683
Year 2	148,567 kWh	-0.50%	€0.2060	€7,688	€38,292	€75,655	€0	0.341 kgCO <sub>2</sub> /kWh	51 TCO <sub>2</sub>	-€30,680	€7,613	€14,295
Year 3	147,824 kWh	-0.50%	€0.2122	€7,880	€39,245	€114,900	€0	0.336 kgCO <sub>2</sub> /kWh	50 TCO <sub>2</sub>	-€30,680	€8,565	€22,861
Year 4	147,085 kWh	-0.50%	€0.2185	€8,077	€40,221	€155,122	€0	0.330 kgCO <sub>2</sub> /kWh	49 TCO <sub>2</sub>	-€30,680	€9,542	€32,402
Year 5	146,350 kWh	-0.50%	€0.2251	€8,279	€41,222	€196,344	€0	0.326 kgCO <sub>2</sub> /kWh	48 TCO <sub>2</sub>	-€30,680	€10,542	€42,945
Year 6	145,618 kWh	-0.50%	€0.2319	€8,486	€42,248	€238,591	€0	0.321 kgCO <sub>2</sub> /kWh	47 TCO <sub>2</sub>	-€30,680	€11,568	€54,513
Year 7	144,890 kWh	-0.50%	€0.2388	€8,698	€43,299	€281,890	€0	0.316 kgCO <sub>2</sub> /kWh	46 TCO <sub>2</sub>	-€30,680	€12,619	€67,132
Year 8	144,165 kWh	-0.50%	€0.2460	€8,915	€44,376	€326,267	€0	0.311 kgCO <sub>2</sub> /kWh	45 TCO <sub>2</sub>	-€30,680	€13,696	€80,828
Year 9	143,445 kWh	-0.50%	€0.2534	€9,138	€45,480	€371,747	€0	0.306 kgCO <sub>2</sub> /kWh	44 TCO <sub>2</sub>	-€30,680	€14,801	€95,629
Year 10	142,727 kWh	-0.50%	€0.2610	€9,366	€46,612	€418,359	€0	0.302 kgCO <sub>2</sub> /kWh	43 TCO <sub>2</sub>	-€30,680	€15,932	€111,561
Year 11	142,014 kWh	-0.50%	€0.2688	€9,601	€47,772	€466,130	-€6,720	0.297 kgCO <sub>2</sub> /kWh	42 TCO <sub>2</sub>	€0	€41,052	€152,613
Year 12	141,304 kWh	-0.50%	€0.2768	€9,841	€48,960	€515,090	-€6,921	0.293 kgCO <sub>2</sub> /kWh	41 TCO <sub>2</sub>	€0	€42,039	€194,652
Year 13	140,597 kWh	-0.50%	€0.2852	€10,087	€50,178	€565,269	-€7,129	0.288 kgCO <sub>2</sub> /kWh	41 TCO <sub>2</sub>	€0	€43,049	€237,701
Year 14	139,894 kWh	-0.50%	€0.2937	€10,339	€51,427	€616,695	-€7,343	0.284 kgCO <sub>2</sub> /kWh	40 TCO <sub>2</sub>	€0	€44,084	€281,785
Year 15	139,195 kWh	-0.50%	€0.3025	€10,597	€52,706	€669,401	-€7,563	0.280 kgCO <sub>2</sub> /kWh	39 TCO <sub>2</sub>	€0	€45,143	€326,929
Year 16	138,499 kWh	-0.50%	€0.3116	€10,862	€54,018	€723,419	-€7,790	0.276 kgCO <sub>2</sub> /kWh	38 TCO <sub>2</sub>	€0	€46,228	€373,156
Year 17	137,806 kWh	-0.50%	€0.3209	€11,134	€55,361	€778,780	-€8,024	0.272 kgCO <sub>2</sub> /kWh	37 TCO <sub>2</sub>	€0	€47,338	€420,494
Year 18	137,117 kWh	-0.50%	€0.3306	€11,412	€56,739	€835,519	-€8,264	0.267 kgCO <sub>2</sub> /kWh	37 TCO <sub>2</sub>	€0	€48,475	€468,969
Year 19	136,432 kWh	-0.50%	€0.3405	€11,697	€58,151	€893,670	-€8,512	0.263 kgCO <sub>2</sub> /kWh	36 TCO <sub>2</sub>	€0	€49,638	€518,607
Year 20	135,749 kWh	-0.50%	€0.3507	€11,990	€59,597	€953,267	-€8,768	0.259 kgCO <sub>2</sub> /kWh	35 TCO <sub>2</sub>	€0	€50,830	€569,437
<b>Totals</b>	<b>2,848,591 kWh</b>				<b>€953,267</b>				<b>859 TCO<sub>2</sub></b>		<b>€569,437</b>	<b>€569,437</b>

Energy Savings

CO<sub>2</sub> Avoided

Client Upside

# EEM 03 - Retrofit Boiler - Life Cycle Analysis



Year	Energy Savings	Saving Degradation	AUP	Est Client Maintenance Savings	Client Annual Savings (Gross)	Cumulative Savings (Gross)	Maintenance Cost	Emissions Factor	Emissions	VE Service Charge	Client Annual Savings (Net)	Cumulative Savings (Net)
Year 1	756,909 kWh	-0.50%	€0.0800	€5,500	€66,053	€66,053	€0	0.203 kgCO <sub>2</sub> /kWh	154 TCO <sub>2</sub>	-€33,272	€32,781	€32,781
Year 2	753,125 kWh	-0.50%	€0.0824	€5,638	€67,695	€133,748	€0	0.200 kgCO <sub>2</sub> /kWh	151 TCO <sub>2</sub>	-€33,272	€34,423	€67,204
Year 3	749,359 kWh	-0.50%	€0.0849	€5,778	€69,378	€203,126	€0	0.197 kgCO <sub>2</sub> /kWh	148 TCO <sub>2</sub>	-€33,272	€36,106	€103,311
Year 4	745,612 kWh	-0.50%	€0.0874	€5,923	€71,103	€274,229	€0	0.194 kgCO <sub>2</sub> /kWh	145 TCO <sub>2</sub>	-€33,272	€37,831	€141,142
Year 5	741,884 kWh	-0.50%	€0.0900	€6,071	€72,871	€347,099	€0	0.191 kgCO <sub>2</sub> /kWh	142 TCO <sub>2</sub>	-€33,272	€39,599	€180,741
Year 6	738,175 kWh	-0.50%	€0.0927	€6,223	€74,682	€421,782	€0	0.188 kgCO <sub>2</sub> /kWh	139 TCO <sub>2</sub>	-€33,272	€41,411	€222,152
Year 7	734,484 kWh	-0.50%	€0.0955	€6,378	€76,539	€498,321	€0	0.185 kgCO <sub>2</sub> /kWh	136 TCO <sub>2</sub>	-€33,272	€43,268	€265,419
Year 8	730,811 kWh	-0.50%	€0.0984	€6,538	€78,442	€576,763	€0	0.183 kgCO <sub>2</sub> /kWh	133 TCO <sub>2</sub>	-€33,272	€45,171	€310,590
Year 9	727,157 kWh	-0.50%	€0.1013	€6,701	€80,393	€657,156	€0	0.180 kgCO <sub>2</sub> /kWh	131 TCO <sub>2</sub>	-€33,272	€47,121	€357,710
Year 10	723,522 kWh	-0.50%	€0.1044	€6,869	€82,391	€739,547	€0	0.177 kgCO <sub>2</sub> /kWh	128 TCO <sub>2</sub>	-€33,272	€49,120	€406,830
Year 11	719,904 kWh	-0.50%	€0.1075	€7,040	€84,440	€823,987	-€8,399	0.174 kgCO <sub>2</sub> /kWh	126 TCO <sub>2</sub>	€0	€76,040	€482,870
Year 12	716,304 kWh	-0.50%	€0.1107	€7,216	€86,539	€910,526	-€8,651	0.172 kgCO <sub>2</sub> /kWh	123 TCO <sub>2</sub>	€0	€77,888	€560,758
Year 13	712,723 kWh	-0.50%	€0.1141	€7,397	€88,691	€999,217	-€8,911	0.169 kgCO <sub>2</sub> /kWh	121 TCO <sub>2</sub>	€0	€79,780	€640,537
Year 14	709,159 kWh	-0.50%	€0.1175	€7,582	€90,896	€1,090,112	-€9,178	0.167 kgCO <sub>2</sub> /kWh	118 TCO <sub>2</sub>	€0	€81,717	€722,255
Year 15	705,614 kWh	-0.50%	€0.1210	€7,771	€93,156	€1,183,268	-€9,454	0.164 kgCO <sub>2</sub> /kWh	116 TCO <sub>2</sub>	€0	€83,702	€805,957
Year 16	702,085 kWh	-0.50%	€0.1246	€7,966	€95,472	€1,278,740	-€9,737	0.162 kgCO <sub>2</sub> /kWh	114 TCO <sub>2</sub>	€0	€85,734	€891,691
Year 17	698,575 kWh	-0.50%	€0.1284	€8,165	€97,845	€1,376,585	-€10,029	0.159 kgCO <sub>2</sub> /kWh	111 TCO <sub>2</sub>	€0	€87,816	€979,507
Year 18	695,082 kWh	-0.50%	€0.1322	€8,369	€100,278	€1,476,863	-€10,330	0.157 kgCO <sub>2</sub> /kWh	109 TCO <sub>2</sub>	€0	€89,948	€1,069,455
Year 19	691,607 kWh	-0.50%	€0.1362	€8,578	€102,771	€1,579,635	-€10,640	0.155 kgCO <sub>2</sub> /kWh	107 TCO <sub>2</sub>	€0	€92,131	€1,161,586
Year 20	688,149 kWh	-0.50%	€0.1403	€8,793	€105,326	€1,684,961	-€10,959	0.152 kgCO <sub>2</sub> /kWh	105 TCO <sub>2</sub>	€0	€94,367	€1,255,953
<b>Totals</b>	<b>14,440,240 kWh</b>				<b>€1,684,961</b>				<b>2,554 TCO<sub>2</sub></b>		<b>€1,255,953</b>	<b>€1,255,953</b>

Energy Savings

CO<sub>2</sub> Avoided

Client Upside

Alternatively – For clients seeking to decarbonise heat, heat pump or heat pump/condenser boiler “hybrid” configuration whereby LPHW is primarily generated electrically can be considered.



# VE Bundled Solution Outcome

Assuming the projects combined had a 5,6,7 year payback. This means that the Client is not making fiscal saves until after the payback period.

**With the Vivid Edge model, the Client**

- Has reduced site energy/carbon intensity
- Is “Cashflow positive” from year 1 AND
- Has a fiscal upside of €54K per annum without spending any capital - *Fiscal saving projections based on conservative AUP and are therefore understated, and ... Operating hours set to increase by 22% therefore annual savings will increase with no increase in service charge ... Client retains all upside.*
- Has eliminated single points of failure and has increased their system redundancy / operating resilience at no extra cost.
- Has kick started their Decarbonisation/Net Zero journey.





# VE Solar As a Service Case Study

## Scope: Roof mounted Solar

### Notes & Assumptions

- Client AUP €0.315/kWh<sub>e</sub>
- System sized in accordance with Client demand profile
- 15-year service term includes all maintenance, warranties and inverter replacement in year 12
- Whilst standard warranties vary from 2 – 7 years (with exception to Solar), the Vivid Edge “Energy as a Service” essentially warrants performance for the full service term ...
- Service Terms are generally 10 years with exception to Solar PV where two Options (10 Years and 15 Years) are available ...
- Emission factor applied at time of analysis 0.330 kgCO<sub>2</sub>/kWh<sub>e</sub>
- Life Cycle Analysis demonstrates how VE “as a Service” model far superior to PPA
- Compliments Decarbonisation pathway and NZEB aspirations



# Sample Solar as a Service (15 Yr) 116 kWp



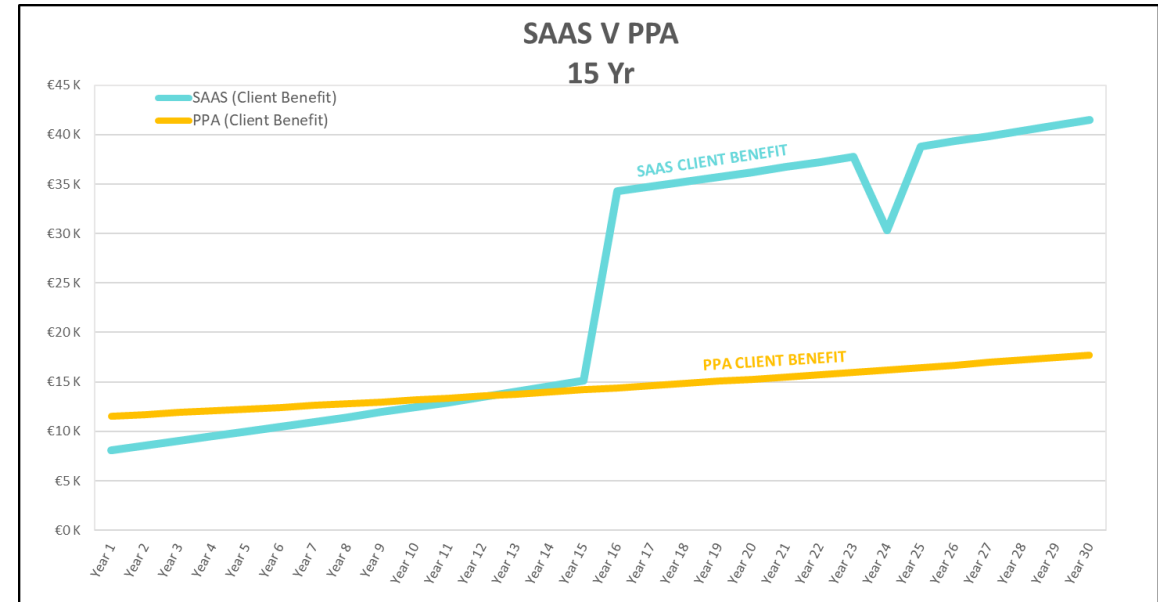
## PROVISIONAL COMMERCIAL SOLAR PV PROPOSAL

### Project Specifics - Client Benefits

Installed Solar Capacity	0.116 MWp
Simulated generation (Year 1)	96 MWh
Avoided CO <sub>2</sub> (30 Years)	722 TCO <sub>2</sub>
Module Degradation per annum	-0.50%
Vivid Edge Monthly Service Charge	-€1,848
Vivid Edge Service Term	180 months

### System

Module (252) No.	252 x 460Wp
Module Useful Life	30 Years
Module Performance Warranty	30 Years
Inverter (1)	Huawei SUN2000 100KTL M1 100kW
Inverter Useful Life	~12 years
Inverter Warranty	10 Years
Mounting System Warranty	25 Years
Lifetime Electrical Energy Offset	2.7 GWh <sub>e</sub>
Market Value @ €0.315/kWh + 2% CPI (30 Years)	€1,135,798
Average Opex delta p/a [10Yrs] with SAAS	€11,496
NPV (lifetime)	<b>€499,484</b>
Blended AUP over 30 Years with SAAS	<b>€0.1505 /kWh<sub>e</sub></b>
Benefit over 25 Years (Upside) with SAAS	<b>€529,441</b>
*PPA Upside-25 Years starting @19.5c/kWh	€346,615
Benefit over 30 Years (Upside) with SAAS	<b>€731,501</b>
*PPA Upside-30 Years starting @19.5c/kWh	€432,685



### Lifecycle /Cashflow Analysis Overleaf

**Note: Any eligible grants will be subject to SEAI approval and will go to the client.**

# Sample Solar as a Service – LCA (15Yr)



Year	Yield	Degradation	Client AUP	Client Annual Savings (Gross)	Cumulative Savings (Gross)	Client Maintenance	Client Replacement Inverters	Emission Factor	Emissions	VE Service Charge	Client Annual Savings (Net)	Cumulative Savings (Net)
1	96,201 kWh	-0.50%	€0.315/kWhe	€30,303	€30,303	€0	€0	0.330 kgCO <sub>2</sub> /kWhe	31.75 TCO <sub>2</sub>	-€22,182	€8,121	€8,121
2	95,720 kWh	-0.50%	€0.321/kWhe	€30,755	€61,058	€0	€0	0.325 kgCO <sub>2</sub> /kWhe	31.11 TCO <sub>2</sub>	-€22,182	€8,573	€16,694
3	95,241 kWh	-0.50%	€0.328/kWhe	€31,213	€92,271	€0	€0	0.320 kgCO <sub>2</sub> /kWhe	30.49 TCO <sub>2</sub>	-€22,182	€9,031	€25,726
4	94,765 kWh	-0.50%	€0.334/kWhe	€31,678	€123,949	€0	€0	0.315 kgCO <sub>2</sub> /kWhe	29.89 TCO <sub>2</sub>	-€22,182	€9,496	€35,222
5	94,291 kWh	-0.50%	€0.341/kWhe	€32,150	€156,100	€0	€0	0.311 kgCO <sub>2</sub> /kWhe	29.29 TCO <sub>2</sub>	-€22,182	€9,968	€45,190
6	93,820 kWh	-0.50%	€0.348/kWhe	€32,629	€188,729	€0	€0	0.306 kgCO <sub>2</sub> /kWhe	28.71 TCO <sub>2</sub>	-€22,182	€10,447	€55,637
7	93,351 kWh	-0.50%	€0.355/kWhe	€33,115	€221,844	€0	€0	0.301 kgCO <sub>2</sub> /kWhe	28.14 TCO <sub>2</sub>	-€22,182	€10,933	€66,571
8	92,884 kWh	-0.50%	€0.362/kWhe	€33,609	€255,453	€0	€0	0.297 kgCO <sub>2</sub> /kWhe	27.57 TCO <sub>2</sub>	-€22,182	€11,427	€77,998
9	92,420 kWh	-0.50%	€0.369/kWhe	€34,110	€289,562	€0	€0	0.292 kgCO <sub>2</sub> /kWhe	27.03 TCO <sub>2</sub>	-€22,182	€11,928	€89,925
10	91,958 kWh	-0.50%	€0.376/kWhe	€34,618	€324,180	€0	€0	0.288 kgCO <sub>2</sub> /kWhe	26.49 TCO <sub>2</sub>	-€22,182	€12,436	€102,361
11	91,498 kWh	-0.50%	€0.384/kWhe	€35,134	€359,314	€0	€0	0.284 kgCO <sub>2</sub> /kWhe	25.96 TCO <sub>2</sub>	-€22,182	€12,952	€115,313
12	91,040 kWh	-0.50%	€0.392/kWhe	€35,657	€394,971	€0	€0	0.279 kgCO <sub>2</sub> /kWhe	25.44 TCO <sub>2</sub>	-€22,182	€13,475	€128,788
13	90,585 kWh	-0.50%	€0.399/kWhe	€36,188	€431,159	€0	€0	0.275 kgCO <sub>2</sub> /kWhe	24.93 TCO <sub>2</sub>	-€22,182	€14,006	€142,795
14	90,132 kWh	-0.50%	€0.407/kWhe	€36,728	€467,887	€0	€0	0.271 kgCO <sub>2</sub> /kWhe	24.44 TCO <sub>2</sub>	-€22,182	€14,546	€157,340
15	89,681 kWh	-0.50%	€0.416/kWhe	€37,275	€505,162	€0	€0	0.267 kgCO <sub>2</sub> /kWhe	23.95 TCO <sub>2</sub>	-€22,182	€15,093	€172,433
16	89,233 kWh	-0.50%	€0.424/kWhe	€37,830	€542,992	-€3,548	€0	0.263 kgCO <sub>2</sub> /kWhe	23.47 TCO <sub>2</sub>	€0	€34,282	€206,715
17	88,787 kWh	-0.50%	€0.432/kWhe	€38,394	€581,386	-€3,637	€0	0.259 kgCO <sub>2</sub> /kWhe	23.01 TCO <sub>2</sub>	€0	€34,757	€241,472
18	88,343 kWh	-0.50%	€0.441/kWhe	€38,966	€620,352	-€3,728	€0	0.255 kgCO <sub>2</sub> /kWhe	22.55 TCO <sub>2</sub>	€0	€35,238	€276,710
19	87,901 kWh	-0.50%	€0.450/kWhe	€39,547	€659,898	-€3,821	€0	0.251 kgCO <sub>2</sub> /kWhe	22.10 TCO <sub>2</sub>	€0	€35,725	€312,435
20	87,462 kWh	-0.50%	€0.459/kWhe	€40,136	€700,034	-€3,917	€0	0.248 kgCO <sub>2</sub> /kWhe	21.66 TCO <sub>2</sub>	€0	€36,219	€348,655
21	87,024 kWh	-0.50%	€0.468/kWhe	€40,734	€740,768	-€4,015	€0	0.244 kgCO <sub>2</sub> /kWhe	21.23 TCO <sub>2</sub>	€0	€36,719	€385,374
22	86,589 kWh	-0.50%	€0.477/kWhe	€41,341	€782,109	-€4,115	€0	0.240 kgCO <sub>2</sub> /kWhe	20.80 TCO <sub>2</sub>	€0	€37,226	€422,600
23	86,156 kWh	-0.50%	€0.487/kWhe	€41,957	€824,066	-€4,218	€0	0.237 kgCO <sub>2</sub> /kWhe	20.39 TCO <sub>2</sub>	€0	€37,739	€460,338
24	85,726 kWh	-0.50%	€0.497/kWhe	€42,582	€866,647	-€4,323	-€7,941	0.233 kgCO <sub>2</sub> /kWhe	19.98 TCO <sub>2</sub>	€0	€30,318	€490,656
25	85,297 kWh	-0.50%	€0.507/kWhe	€43,216	€909,864	-€4,431	€0	0.230 kgCO <sub>2</sub> /kWhe	19.58 TCO <sub>2</sub>	€0	€38,785	€529,441
26	84,870 kWh	-0.50%	€0.517/kWhe	€43,860	€953,724	-€4,542	€0	0.226 kgCO <sub>2</sub> /kWhe	19.19 TCO <sub>2</sub>	€0	€39,318	€568,759
27	84,446 kWh	-0.50%	€0.527/kWhe	€44,514	€998,238	-€4,656	€0	0.223 kgCO <sub>2</sub> /kWhe	18.81 TCO <sub>2</sub>	€0	€39,858	€608,617
28	84,024 kWh	-0.50%	€0.538/kWhe	€45,177	€1,043,415	-€4,772	€0	0.219 kgCO <sub>2</sub> /kWhe	18.44 TCO <sub>2</sub>	€0	€40,405	€649,022
29	83,604 kWh	-0.50%	€0.548/kWhe	€45,850	€1,089,265	-€4,891	€0	0.216 kgCO <sub>2</sub> /kWhe	18.07 TCO <sub>2</sub>	€0	€40,959	€689,981
30	83,186 kWh	-0.50%	€0.559/kWhe	€46,533	€1,135,798	-€5,014	€0	0.213 kgCO <sub>2</sub> /kWhe	17.71 TCO <sub>2</sub>	€0	€41,520	€731,501
Totals	2,686,236 kWh				€1,135,798				722 TCO <sub>2</sub>		€731,501	€731,501

Grid Offsets

CO<sub>2</sub> Avoided

Client Upside

Cashflow positive - Service Charge includes maintenance, warranties, inverter replacements in Yr. 12. Seamless handover in Yr. 16

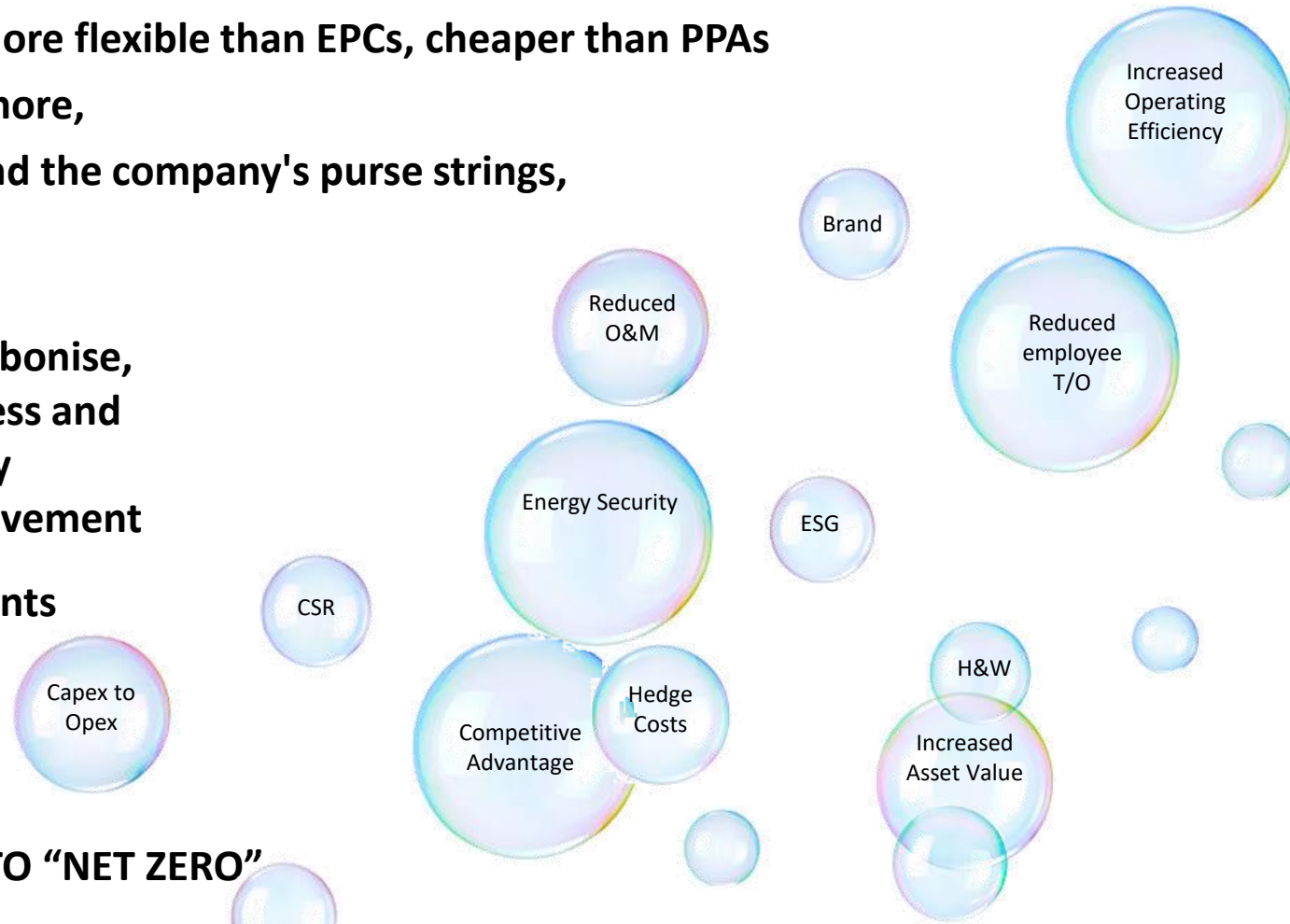
# EaaS Benefits



There are several Client benefits.

The Energy as a Service model is a form of “Wrapper” service that

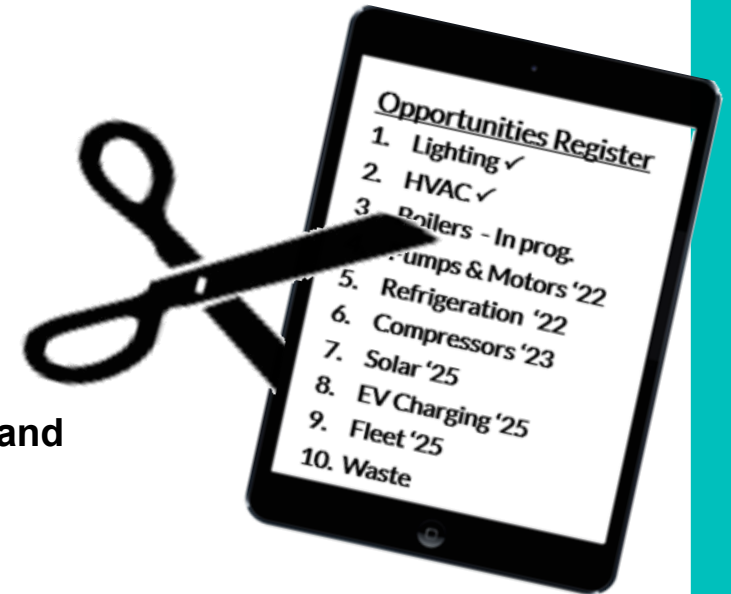
- is probably, less complex and more flexible than EPCs, cheaper than PPAs
- incentivises the Client to save more,
- allows the Client to think beyond the company's purse strings,
- allows energy managers to
  - do more,
  - to digitise, optimise, decarbonise,
  - to futureproof their business and
  - access savings more swiftly
  - focus on continuous improvement
- actions “End of Life” replacements
- de-risk the Client's operation
- improves compliance,
- provides peace of mind,
- OFFERS SWIFTER TRANSITION TO “NET ZERO”



# Conclusion

An Energy as a Service enables energy projects and other energy conservation measures for large organisations who have other priorities for their capital.

- The Energy Crisis! Energy Efficiency is more important than ever!!
- Stop sweating the assets! Inaction leads to waste!
- Stop thinking like you're buying it!
- Rethink the “long-term” energy strategy! Do “much more” and more swiftly!
- You have the money... You're just wasting it on inefficient systems!
- There are many forms of ‘creative financing’ that facilitate energy efficiency and renewable energy. Don't let capital be a challenge!
- You will not achieve Net Zero without Energy Efficiency!





## Contact us:

Vivid Edge,  
Belfield Innovation Park,  
Dublin 4, Ireland  
[www.vividedge.ie](http://www.vividedge.ie)



**Tracy O'Rourke**  
**Chief Executive Officer**  
Commercial  
[torourke@vividedge.ie](mailto:torourke@vividedge.ie)  
+353 87 236 7182



**Paul Boylan**  
**Technical Director**  
Technical  
[pboylan@vividedge.ie](mailto:pboylan@vividedge.ie)  
+353 87 234 5399