

SAVING ENERGY, MANAGING RESOURCES





Welcome to ESTA
Spring Energy Conference

**Reduce Carbon & Energy
Costs using Energy Efficient lighting &
Innovative Funding**

Shaun Gilder
Chalmor Limited



25 Years experience in Public & Private Sectors

- Long Life energy Efficient Lighting
- Intelligent Energy Saving Lighting & Heating Controls
- Lifesaver – A ‘Real Time’ Lifesaving Solution





Turnkey Approach to Project Management:

- Initial Energy Assessment
- Life Time Saving Analysis
- Detailed System Design
- Supply
- Installation
- Commissioning & Training
- Monitoring





Interesting Statistics

- Lighting accounts for 20-40% of electricity costs in most organisations
- Upgrading T12 & T8 fittings to T5 will save as much as 30% and will retain a high light output
- Occupancy sensors can reduce lighting costs by 30%
- Two thirds (66%) of consumers say it's important to buy from environmentally responsible companies
- 81% feel it is important that public sector organisations tackle climate change and cut carbon
- Energy wasted by businesses last year cost an estimated £2.5 billion, or the equivalent of 20 million tonnes of carbon dioxide
- A 20% saving in energy consumption can have the same effect as a 5% increase in sales!



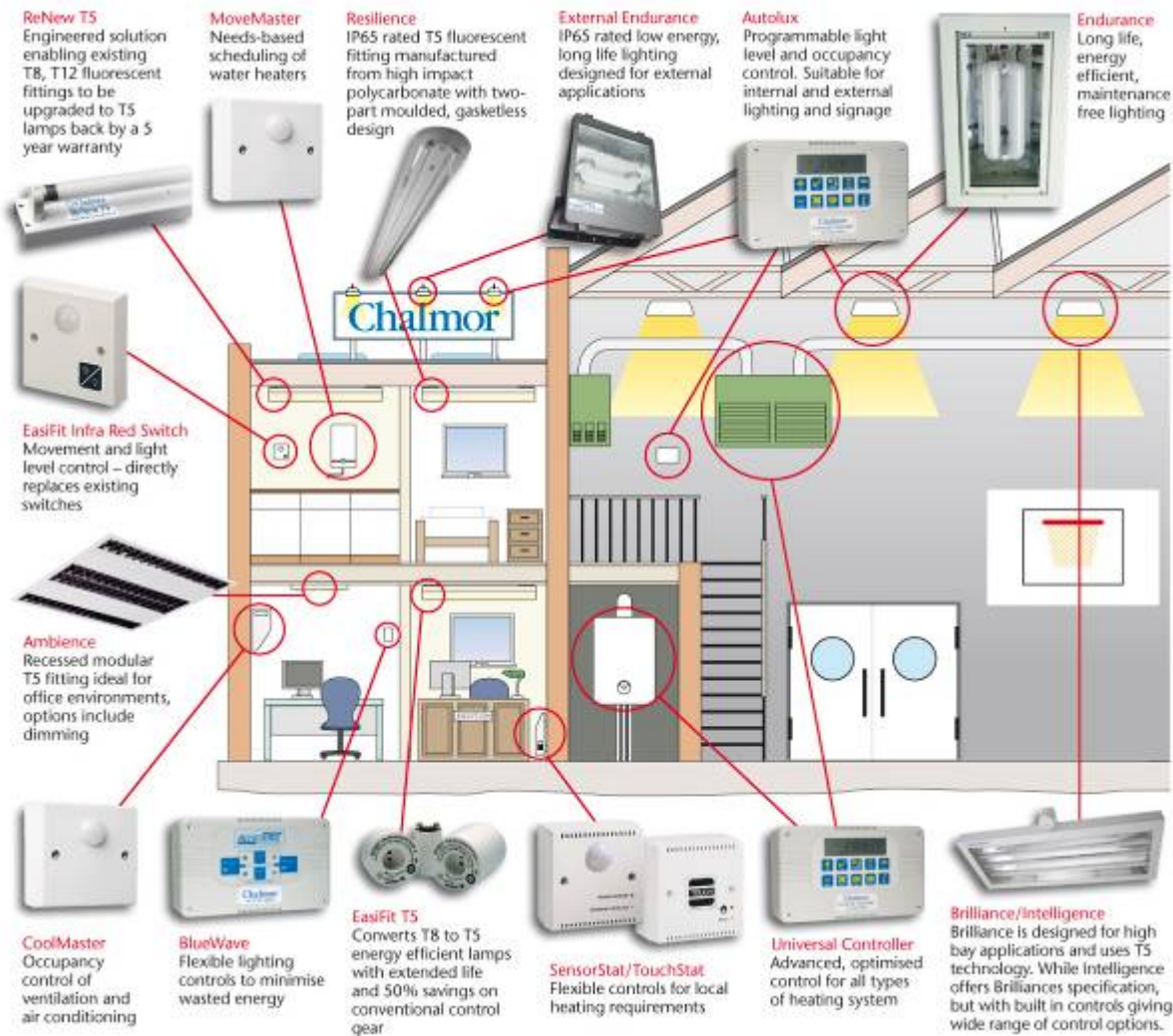
The Business Case for Efficient Lighting

- Carbon Trust and Carbon Trust Standard
- Carbon Reduction Commitment
- Best Practise - Be Environmentally Responsible
- Reduce Energy Usage and Costs
- Reduce Maintenance Costs
- Health & Safety
- Reduced Fire Risk
- Improve staff performance

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The opportunities for saving



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ReNew T5

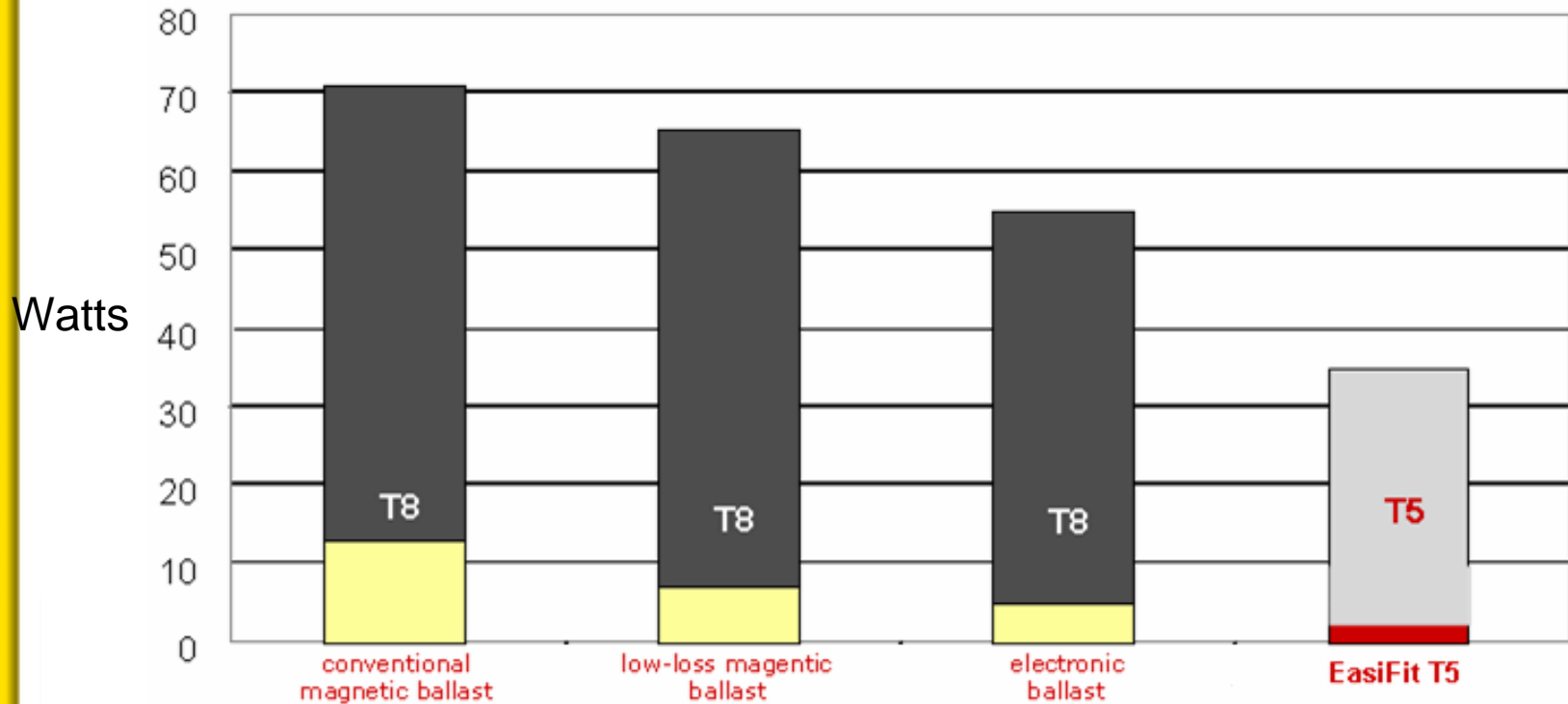
- Quick, cost-effective fluorescent lamp upgrade to T5 from T8/T12
- Transforms existing lighting with 'brand new' appearance using new lamps, lamp holders and control gear
- Major reductions in energy consumption and carbon emissions
- 'As New' performance with 5-year warranty
- Emergency versions available
- Wide selection of lamps and control gear
- Improved lighting performance
- Improved lighting output
- Capability to change lamp configuration
- Reduced maintenance & stock holding



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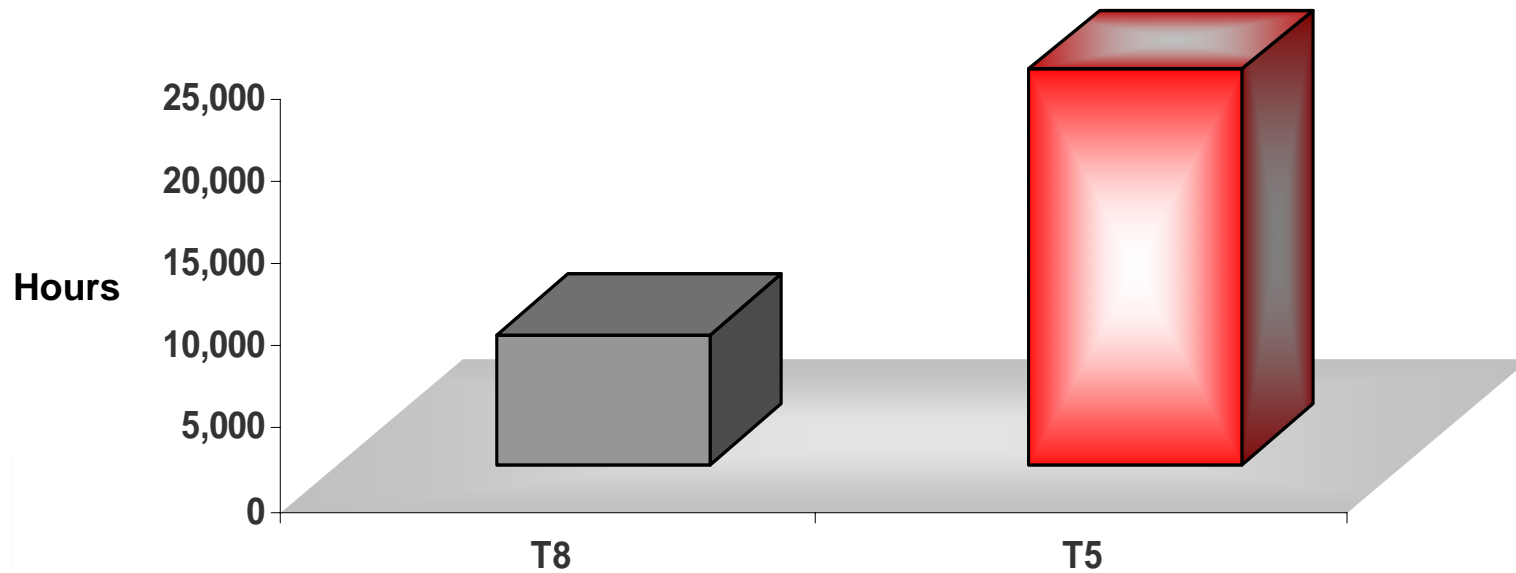
T5 Energy Saving Lamp Comparison



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T5 offers 3 x Longer Lamp Life



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Return on Investment Analysis

Operational cost saving		44.88%
ROI parts only	(years)	0.62
ROI installed	(years)	0.96
Annual savings		£11,867.88
Annual CO2 saving	(tonnes)	57.41
Project cost		£11,400.00
Parts		£7,400.00
Super Service Plan		£0.00
Installation		£4,000.00

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Pay back analysis			
Present Costs		Projected Costs	
Number of Discharge fittings	60	Number of Brilliance/Intelligence	60
Lamps per fitting	1	Lamps per fitting	4
Load per lamp (inc. losses)	450 W	Load per lamp (inc. losses)	54 W
Number of 6ft fittings	50	Number of ReNew T5	50
Lamps per fitting	1	Lamps per fitting	1
Load per lamp (inc. losses)	84 W	Load per lamp (inc. losses)	49 W
Number of 8ft fittings	300	Number of ReNew T5	300
Lamps per fitting	2	Lamps per fitting	4
Load per lamp (inc. losses)	120 W	Load per lamp (inc. losses)	28 W
Total Load	103.2 kW	Total Load	49.0 kW
Maximum hours per day	10 hours	Maximum hours per week	10 hours
Days per week	6 days	Days per week	6 days
Weeks per year	52 weeks	Weeks per year	52 weeks
Maximum hours run per annum	3120 hours	Maximum hours run per annum	3120 hours
Percentage of control savings	0 %	Percentage of control savings	35 %
Actual hours run	3120 hours	Actual hours run	2028 hours
Annual Consumption	321984 kWh	Annual Consumption	99392 kWh
Unit rate	8.1 p	Unit rate	8.1 p
CCL	0.456 p	CCL	0.456 p
Annual Electricity Cost	£27,549 p	Annual Electricity Cost	£8,504 p
Cost of lamps	£6.10 p	Cost of lamps	£2.20 p
Cost of disposal for lamps	£1.00 p	Cost of disposal for lamps	£1.00 p
Cost of access equipment	£0.00 p	Cost of access equipment	£0.00 p
Cost of labour per fitting	£10.00 p	Cost of labour per fitting	£10.00 p
Maintenance visit cost	£9,141.00 p	Maintenance visit cost	£2,028.00 p
Lamp life	12000	Lamp life	24000
Maintenance Cycle	3.8 years	Maintenance Cycle	11.8 years
Maintenance Cost per annum	£2,377	Maintenance Cost per annum	£171
Total Annual Running Cost	£29,926	Total Annual Running Cost	£8,675



DATE	
REF	
Please quote on all correspondence	
VALID FOR	30 days
RAISED BY	Shaun Gilder 07506 74 88 32
ROI	3.0
Annual Saving	£21,250
Project Cost	£63,225.00

71% Operational Cost Saving

69% Carbon Saving



Why don't projects go ahead?

- Statement: We're sceptical about the level and persistence of the savings?
- Advice: We can offer savings guarantees and 'on site support' of our integrated controlled lighting systems.
- Statement: We don't have the staff to run or deliver such a project?
- Advice: No problem, we offer a turnkey service; survey, analysis, design, project management, installation, commissioning and training!
- Statement: Other projects offer faster paybacks?
- Advice: Consider the additional benefits and life savings.
- Statement: We don't have the capital needed?
- Advice: Can we raise funds from grants, loans or elsewhere?



Benefits of Funding

- No capital outlay
- Working capital is preserved and additional finance leaves existing facilities untouched
- Tailored plans to suit requirements; to optimise fiscal benefit, or to deliver cash flow requirements
- Positive Cash flow
- Speeds up decision making process
- Enables a faster project roll-out
- Quicker implementation means quicker savings
- Fixed payments allowing for easier budgeting
- Ideal equipment provides longevity rather than 'what the budget can afford'

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Lifesaver “pay as you save” Scheme”

Three year PAYS repayment plan

Quarters Saving	1	2	3	4	5	6	7	8	9	10	11	12
	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50
Repayment	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75	£5,268.75
Cumulative Cashflow	£43.75	£87.50	£131.25	£175.00	£218.75	£262.50	£306.25	£350.00	£393.75	£437.50	£481.25	£525.00

Four year PAYS repayment plan

Quarters Saving	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50	£5,312.50
Repayment	£3,951.75	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55	£3,951.55
Cumulative Cashflow	£1,360.75	£2,721.70	£4,082.65	£5,443.60	£6,804.55	£8,165.50	£9,526.45	£10,887.40	£12,248.35	£13,609.30	£14,970.25	£16,331.20	£17,692.15	£19,053.10	£20,414.05	£21,775.00

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Any Questions?



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