

ENVIRONMENT OVERVIEW AND SCRUTINY PANEL

19 JULY 2023

UPDATE ON:

- (i) STREET LIGHTING**
 - (ii) SOLAR ENERGY AND**
 - (iii) ELECTRIC VEHICLE CHARGING POINTS**
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Summary

1. The Cabinet Member with Responsibility for Highways and Transport and Senior Officers from the Council's Directorate of Economy and Infrastructure have been invited to attend the meeting to provide an update on Street lighting, solar energy and electric vehicle charging points.
2. The update will include:
 - (i) Street Lighting: information on those Parish Councils within the Parish Initiative to establish where they are with light-emitting diode (LED) conversion, an update on the situation regarding off street lighting and outcomes of the remaining concrete column survey (phases 6-10) and progress with the LED roll-out, and its anticipated conclusion.
 - (ii) Grants available for the installation of Solar energy
 - (iii) Electrical Vehicle Charging points

Street Lighting

3. The Panel previously received an overview of Street Lighting in March 2022. The Reports and Minutes of those discussions are available under Background Papers.
4. The Panel will recall that the Street Lighting service is led by Worcestershire County Council (the Council) and consists of a small team of specialist Council staff with expertise to enable effective operation of the service. Delivery is provided by the Council's Lighting Maintenance contractor, Prysmian, who are responsible for maintaining all of the Council's street lights. This is further augmented by Jacobs under the Professional Services Contract (PFC) and includes assistance with specific project management, complex planning advice, undertaking new designs and additional lighting engineer capacity.
5. The Council has a duty of care under the Highways Act 1980 to maintain a safe highways network, including street lighting and illuminated signs and bollards. It is not a duty to provide lighting, but it does mean that all lighting and sign installations must be maintained in a safe condition.

6. The street lighting service in Worcestershire provides benefits to the communities of the County in many ways including reduction in night-time accidents and reducing both crime and in the minds of many people, fear of crime. The economic development contribution to towns in the County cannot be underestimated. Good street lighting engenders a feeling of well-being by enabling people to continue their business and leisure activities during the hours of natural darkness. Recent and ongoing Public Realm initiatives in many Worcestershire towns have included elements to upgrade the street lighting and this helps to improve the night-time environment.
7. The street lighting service works with other highway teams within the Economy and Infrastructure Directorate when working on major projects, highway safety schemes and new developments, together with regular engagement with the Liaison Officers regarding street lighting matters raised by Local Members. They also work closely with the Council's Ecology Team and City/District/Town and Parish Councils.

Service Aims and Objectives

8. The aim of the Council's Street Lighting service is to create a safer and more secure night-time environment by providing energy efficient and cost-effective systems of street lighting and illuminated signs.
9. The objectives of the street lighting service are primarily to:
 - Ensure the safety of the public
 - Provide a high-quality, cost-effective service
 - Utilise the latest energy saving and effective LED lanterns
 - Reduce the carbon footprint
 - Minimise environmental impact.
 - Implement best practice in systems and operations.
 - Reduce crime and fear of crime

Progress since March 2022: The Parish initiative

10. There are 14 Parish Councils that are within the Parish Initiative. Their lights are maintained by the Council's lighting Contractor, Prysmian under agreement and costs for upgrades and repairs are reimbursed to the Council. The table below shows the number of Parishes within the parish initiative and their current asset split between LED and older luminaires.

Parish initiative members: Lighting asset breakdown											
Parish	Luminaire type			Column type							Bollards
	LED	Non LED	Total	Concrete	Steel /Gal steel	Pole Bracket / Wall Bracket / Wall mounted	Cast Iron	Raise/ Lower	Cantilever arm	Fibreglass	1m Churchouse Bollard
Badsey	74	0	74	21	42	9	0	2	0	0	0
Bellbroughton	41	36	77	5	57	15	0	0	0	0	0
Broadway	62	71	133	0	119	0	13	1	0	0	0
Clent	22	13	35	13	22	0	0	0	0	0	0
Dodderhill	14	1	15	6	9	0	0	0	0	0	0
Fladbury	40	6	46	2	27	13	4	0	0	0	0
Hagley	55	0	55	22	33	0	0	0	0	0	0
Harvington	39	0	39	0	31	2	0	0	6	0	0
North & Middle Littleton	40	0	40	0	21	19	0	0	0	0	0
Norton & Lenchwick	1	11	12	5	0	4	0	0	3	0	0
Pershore	87	26	113	28	80	1	1	0	0	0	0
Powick	88	1	89	20	38	23	0	0	0	9	0
Stoke Prior	19	10	29	5	19	0	0	0	0	0	5
Wolverley & Cookley	268	7	275	162	111	2	0	0	0	0	0
Totals:	850	182	1032	289	609	88	18	3	9	9	5

11. In April 2022, the Council advised all initiative parishes of the impending energy rate increase and calculated the suggested additional cost they would incur as a result of the new tariff. The Council also switched to quarterly invoicing (as opposed to annually) to reduce the financial risk to the Council and allow the parishes better financial forecasting and budgetary control.
12. Initiative lighting is included in the Council's testing regime and, where issues are encountered, the Council will advise those parishes of replacement requirements. Similarly, parishes will approach the Council with a budget and seek advice as to what should be prioritised for upgrade or replacement. Currently, two of the above parishes are having a number of concrete columns programmed for replacement as well as a number of conversions of heritage lanterns to LED.
13. Where parishes have lighting, but are not part of the initiative, they are responsible for their own maintenance and upgrades.

The Council's Concrete column testing.

14. Recognising the service life, a detailed survey of the concrete columns commenced in 2021. The testing, originally programmed to conclude in May 2022, concluded one month later due to an additional phase (10) being added to the original nine. The condition of the stock has been ranked from 1 (good condition) to 5 (requires immediate attention). The table overleaf summarises the entire condition of the concrete assets across the County, to include all columns on divorced, or isolated footway areas.

Phase 1-4 results:		
Category	Recommendation	Number
1	N/A due to column age	0
2	Re-inspect after 2 years	2336
3	Replace within 2 years	179
4	Replace as soon as practicable	29
5	Remove/make safe immediately	2
Total:		2546
Phase 5-10 results:		
Category	Recommendation	Number
1	N/A due to column age	0
2	Re-inspect after 2 years	5256
3	Replace within 2 years	384
4	Replace as soon as practicable	64
5	Remove/make safe immediately	19
Total		5723
	Total No of concrete columns Countywide: 8269	

15. All category 5 columns have been replaced and to date the Council have continued to replace concrete columns as they are encountered as part of its routine maintenance operations. The main focus has been the Rapid LED (RLED) rollout programme. Once the RLED concludes, the Council will then focus on wholesale concrete column replacements with a view to spending £2+ million this financial year to reduce the concrete column inventory.

16. Along isolated and divorced footpaths, the Council have 4748 lighting assets. These are split as per the table below:

Divorced/isolated lighting asset split						
Concrete	Galvanised Raise/Lower	Galvanised Steel	Non galvanised	Aluminium	Cast Iron	Totals
962	1135	1958	652	25	16	4748

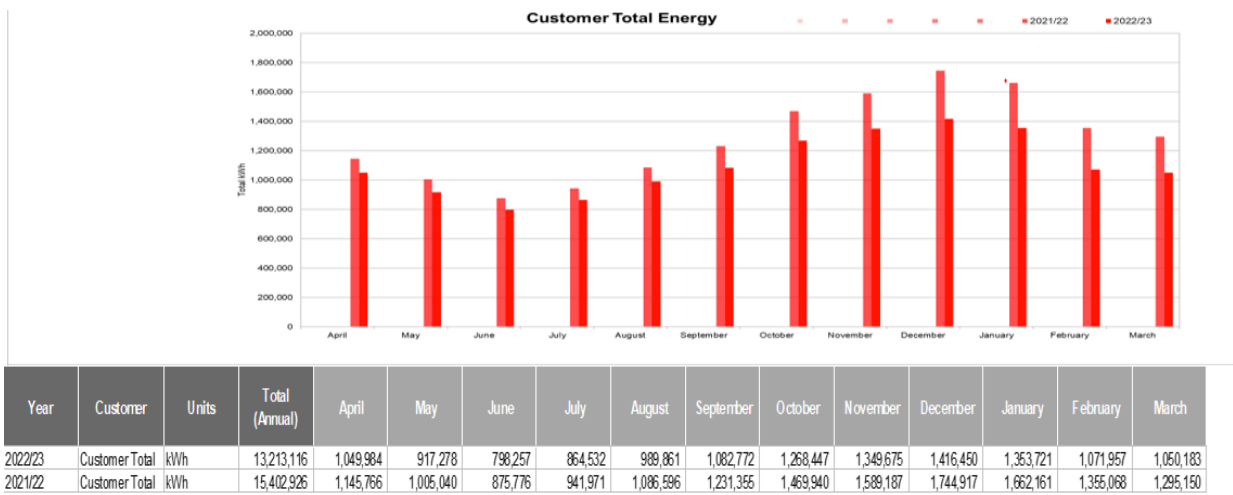
Rapid LED Rollout

17. In April 2022, the Council commenced a £6m Rapid LED Rollout Programme. Originally planned for completion in March 2024, the objective was to condense a 3-year programme into 18 months and convert all remaining non-LED to LED. 21,157 assets were identified requiring conversion (the remainder of the inventory having already been upgraded previously) and these went through a comprehensive design check and ecological assessment to ensure the Council was compliant with the lighting level requirements and ecological laws. Since its commencement in April 2022, the Council has upgraded 20,781 lanterns (98%) to LED. The accelerated

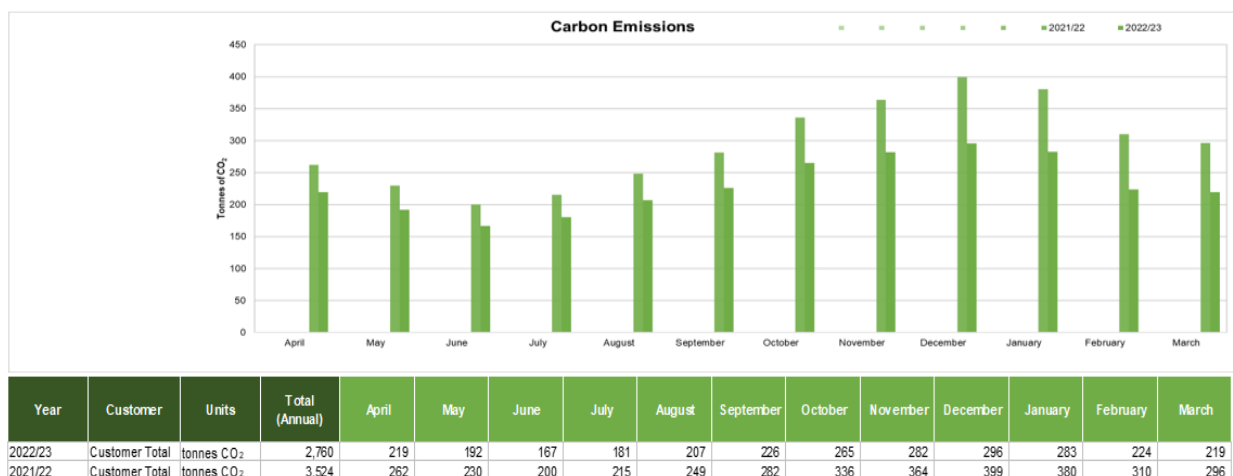
programme completion date is October 2023 (i.e. 18 months from commencement), however it is anticipated that the Council will complete all conversions (based on the original count) well in advance of this date.

18. It is worth however noting that a number of anomalies and mismatches within the asset database have been identified as a result of ongoing analysis and contractor engagement. The result is that an additional 1,778 assets have been identified for conversion. The £6m budget will cover these additional works and the anticipation is that the contractor will complete these conversions by year end 2023.

19. The table below shows the annual energy reduction use for the Council’s non metred assets and as a result of the conversions undertaken an average annual reduction of 14.1 % (2,189,810 KWh) was realised when compared against 2021-2022 figures.



20. The table below shows the annual carbon reduction for the Council’s non metred assets and as a result of the conversions undertaken an average annual reduction of 21.7 % (764 Tonnes) was realised when compared against 2021-2022 figures.



Grants Available for Installation of Solar Energy

21. Since 2011, the Council has operated a number of schemes to support schools, businesses, farms and villages halls to reduce their energy usage and adopt renewable energy.
22. Under the recent Public Sector Energy Efficiency Programme, a number of schools and colleges accessed support and grant funding to implement schemes which would reduce their demand for energy, such as the installation of LED lighting; this scheme was funded via European Regional Development Fund and therefore ceased on 30 June 2023.
23. The Business Energy Efficiency programme and the Low Carbon opportunities programme offered free energy efficiency assessments provided by an Energy Advisor who assessed the businesses' equipment, premises, processes and performance to identify opportunities for improvements in energy usage. Businesses were then able to access a grant of up to £20,000 + to implement those recommendations. These programmes supported over 800 Worcestershire Small and Medium-sized enterprises (SMEs), resulting in c.£3.5m grant funding awarded, which lead to a reduction of 7000 tonnes CO₂e, 3MWp increase in renewable energy capacity, and an average of a 28% energy saving. These programmes were EU funded and therefore recently ceased in June 2023.
24. Recognising the ongoing importance of reducing energy demand, the Council has been working with district councils to allocate funding from the Government's new UK Shared Prosperity Fund (UKSPF) to continue to provide services to businesses. In Redditch and Wyre Forest, this support will extend to non-commercial premises such as village halls etc. The organisations will be able to access advice, have access to an expert who will undertake an energy audit and provide recommendations tailored to the business. The organisations will then be able to access a grant (match 60/40) of up to £10,000 to support with the implementation of reducing energy demand and possible renewable energy solutions.
25. Farms are unable to access support via UKSPF, but via DEFRA they can access advice and support from the Farm Resilience Programme, and future rounds of the Farming investment fund are expected.

Electric Vehicle (EV) Charging Points

26. Currently the Council is developing a strategy regarding Electric Vehicle (EV) charging points and implications. This is an evolving picture in Worcestershire and nationally. From a Council perspective, EV will fundamentally link to Local Transport Plan 5.

Purpose of the Meeting

27. The Panel is asked to:
 - consider and comment on the latest information on Street Lighting, solar energy and electric vehicle charging points
 - agree any comments to highlight to the Cabinet Member.

- determine whether any further information or scrutiny is required at this stage

Contact Points

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Background Papers

In the opinion of the proper officer (in this case the Assistant Director of Legal and Governance) the following are the background papers relating to the subject matter of this report:

[Agenda for Economy and Environment Overview and Scrutiny Panel 7th March, 2018.](#)

[Agenda for Council on 8th November, 2018.](#)

[Agenda for Economy and Environment Overview and Scrutiny Panel, 5th March, 2019.](#)

[Agenda for Economy and Environment Overview and Scrutiny Panel, 4th August, 2020.](#)

[Agenda for Economy and Environment Overview and Scrutiny Panel on Tuesday, 1st March, 2022, 2.00 pm - Worcestershire County Council \(moderngov.co.uk\)](#)

All Agendas and Minutes are available on the Council's website [weblink to Agendas and Minutes](#)