



# Changing and investing in lighting

## South Gloucestershire Council

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## South Gloucestershire

29,500 street lights

- 3500 lit road traffic signs and bollards.
  - Energy – 15M kWh = £1.7M/year
    - CO<sub>2</sub> - 6000t



# Prompts for Action

## Strategic Objective

Cut backs!

- Local and national spending targets.
- Reduce the Council's carbon footprint.



## So what could we do?

- Trimming?
- Switch Off
- Part night lighting?
  - LED?
  - Dimming?



## Part Night Lighting

- 2008-2014
- 60% of units
- Petitions, moans, groans
- Perceptions vs reality
  - Acceptance



## Fast forward 2012 – all roads lead to LED?

Yes but still had questions

- Technology
- Supply chain pressure
  - Public
  - Workforce
- How much will it save



# Project Brief

## Strategy

- Key drivers must align with corporate aims
  - Financial constraints
  - Operational issues

What's best for SGC....one size doesn't fit all

Business case



# Objectives & Methodology

## Why and What

- Financial
- Human Resource
- Process and Framework
- Customer
- Ethical and Environmental

## How, and Where

- WLCEM
- Research
- Analysis





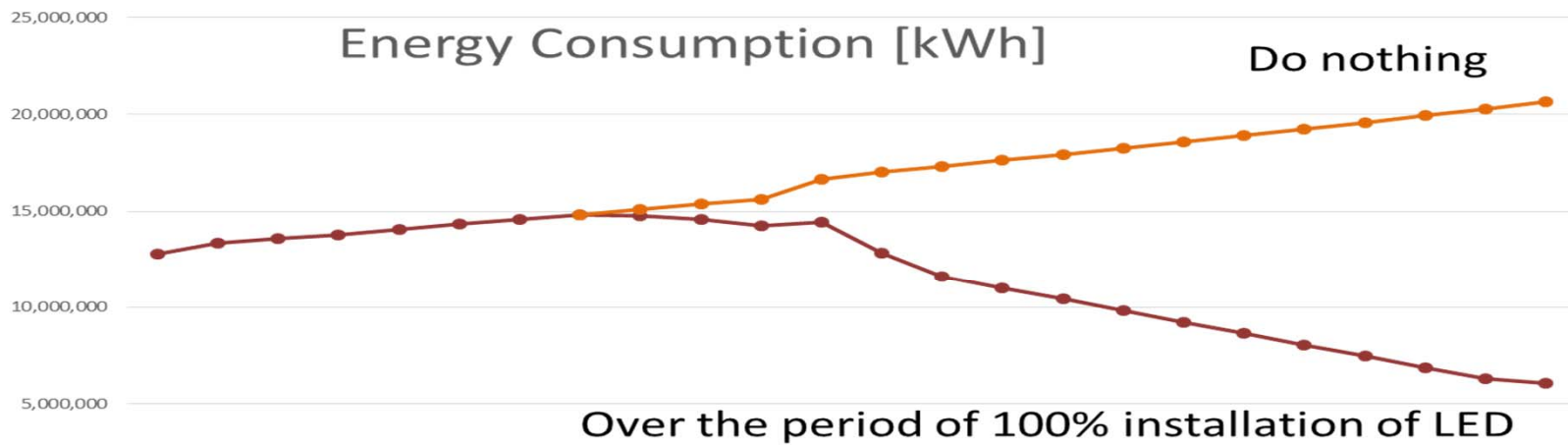
## Recommendation

A balanced and deliverable strategy with known risks and predicted outcomes

- 10 year programme
- Bespoke dimming profile
- Approved by Council Sept 2013



# Expected Energy results

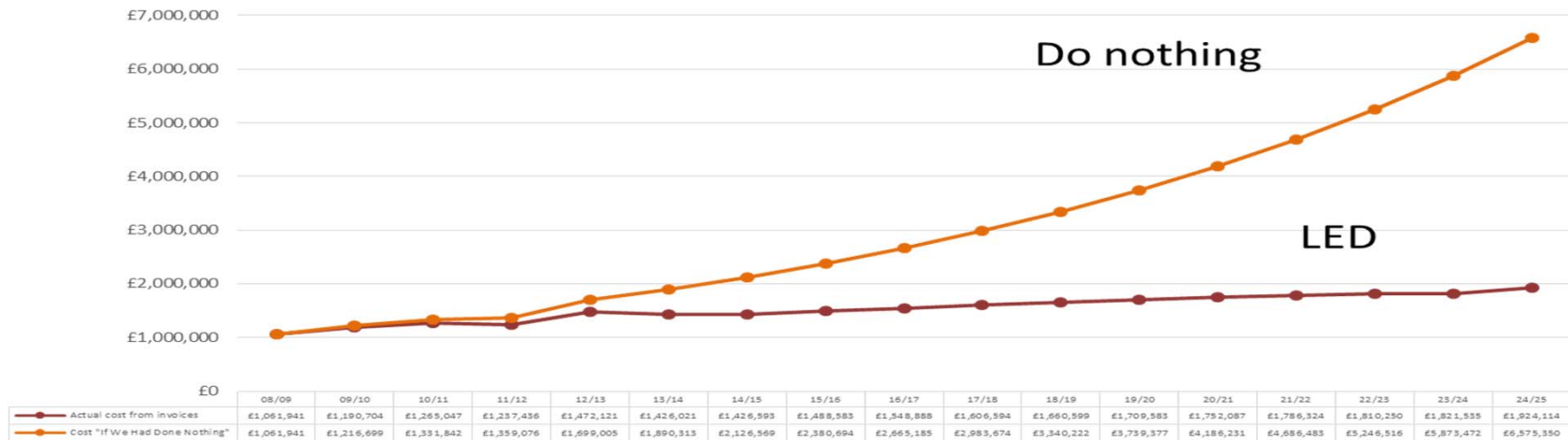


	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Actual energy consumption from invoices	12,783,820	13,345,496	13,568,938	13,797,766	14,054,477	14,326,151	14,563,805	14,829,308	14,769,738	14,589,398	14,282,903	14,439,163	12,831,122	11,813,657	11,016,642	10,420,863	9,826,457	9,233,425	8,641,629	8,051,343	7,462,431	6,874,892	6,288,864	6,039,109
"If We Had Done Nothing" energy consumption								14,829,308	15,092,185	15,359,723	15,632,003	16,064,512	17,008,759	17,312,050	17,618,938	17,931,267	18,249,132	18,572,632	18,901,867	19,236,938	19,577,949	19,925,005	20,278,213	20,637,682



# Expected Financial results

Energy [£]





## Other benefits and consequences

- Recycled materials
- Reduced scouting
- Alignment of all maintenance functions
- Natural staff reductions
- Obtrusive light



## So far so good

- Year 1 – 2500 lanterns
  - 12 complaints
- Main roads/high wattage areas



## Concerns

- Dark areas
- Private areas
- Perceptions



## Questions & Answers

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