



NBEI-EDT North Working Paper

Measuring and mapping the economic impact of LEDCOM

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**DELIVERING SOCIAL CHANGE
THROUGH THE SOCIAL INVESTMENT FUND**

Executive Summary

This report presents the findings of research undertaken by the North Belfast Ethical Investment programme which has sought to better understand not just the social but also the economic impact of social enterprises like LEDCOM. Completed by academics from Queen's University Belfast working in collaboration with LEDCOM's senior management team, the report presents the findings of a Local Multiplier 3 (LM3) analysis of the organisations employee and supplier expenditure during the 2015/2016 financial year. Operated as a social enterprise, LEDCOM works to stimulate economic development and provide social benefit for local communities living across the Mid & East Antrim council area.

Calculating the economic impact of LEDCOM with respect to the Mid & East Antrim Council Area

In this study the economic impact of LEDCOM in Mid & East Antrim is assessed over three rounds of the organisation's local expenditure:

- The first round is LEDCOM's total expenditure during 2015/2016;
- The second round is LEDCOM's total expenditure on suppliers and its employees;
- The third round is the money re-spent by the suppliers and employees themselves.

In each round, the proportion of money spent in the local economy is calculated in order to assess the overall economic impact of LEDCOM's expenditure in Mid & East Antrim.

Round one: Total expenditure

The total expenditure by LEDCOM for the financial year 2015/2016:

- Expenditure on suppliers, grant recipients and employees (gross) = **£734,713.40**

Round two: Expenditure on suppliers and employees

LEDCOM spent a total of **£234,713.40** with **143** suppliers. Of this amount:

- **£124,283.83 (44.42%)** was among suppliers based in Mid & East Antrim. This equated to a total number of **70** suppliers;
- LEDCOM spent a total (gross) of **£500,000.00** and **£348,000.00** (net) on **8** employees resident in Mid & East Antrim

Round three: Re-expenditure amount of suppliers and employees

Suppliers re-spent **£75,442.92** in the Mid & East Antrim area (or **61p** in every **£1**) and LEDCOM employees re-spent **£1,205,598.76** back within Mid & East Antrim, which is equivalent to **51p** in every **£1** spent.

Local multiplier 3 analysis

LM3 ratio	1.87
Percentage spend retained in Mid & East Antrim	37.41%

These findings present a LM3 ratio for LEDCOM of **1.87**. In simple terms this means that for every **£1** spent by LEDCOM, an additional **87p** is spent or re-spent in Mid & East Antrim. Finally, after 3 rounds of spend analysis, **37.41%** of LEDCOM's annual expenditure (both on salaries and suppliers) was retained in the Mid & East Antrim council area. In the 2015/2016 this equated to **£274,822.99**

1 Introduction

This report presents the findings of research undertaken by the North Belfast Ethical Investment programme which has sought to better understand not just the social but the economic impact of social enterprises like LEDCOM. Completed by academics from Queen's University Belfast working in collaboration with representatives from LEDCOM's senior management team, the report presents the findings of a Local Multiplier 3 (LM3) analysis of the organisations employee and supplier expenditure during the 2015/2016 financial year. Operated as a social enterprise, LEDCOM works to stimulate economic growth and improve the lives of local people living in the Larne and Mid & East Antrim area. Therefore for the purpose of this study, the economic impact analysis has been undertaken at the local Mid & East Antrim council area. The contents of the report will be organised under the following sections:

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2 Research methodology

To make an assessment of the local economic impact of LEDCOM in Mid & East Antrim, NBEI has adopted a similar model of economic impact assessment called Local Multiplier 3 (LM3). Initially devised by the New Economics Foundation (NEF), LM3 assesses the impact of an organisation with respect to a pre-defined local economy or area over three rounds of expenditure as well as a fixed time period—usually a financial year. This allows for a critical understanding of an organisations supply chain and also shows exactly how much annual spend leaks out of the local area. It also provides a ratio which expresses for every £1 of income, how much is re-spent by the organisation within a pre-defined local economy—which for the purpose of this study is Mid & East Antrim. To better understand the three component rounds of LM3, Figure 1 has been compiled to explain the methodology adopted for the economic impact analysis.

Figure 1 LM3 methodology with respect to LEDCOM

Round 1	<p>Total Expenditure</p> <p>Round 1 explores the total expenditure of an organisation for a defined time period and looks at what the organisation spends in terms of suppliers, employees and overheads. In terms of LEDCOM, we have looked at total spend for the financial year 2015/16 (1 April 2015 to 31 March 2016), using the required information derived from the organisation’s LEDCOM supplier records.</p>
Round 2	<p>Expenditure with local contractors/suppliers and employees</p> <p>Round 2 has sought to identify the geography of contractors and suppliers with respect to LEDCOM’s location, detailing particularly the extent to which spend upon the supply chain is with contractors based in or located in a branch within Mid & East Antrim. To undertake the analysis we have used GIS ArcMap software to geocode all supplier lists and identify which suppliers are located in as well as outside the local Mid & East Antrim Council area. Round 2 has also sought to identify the residential geography of LEDCOM employees, detailing particularly the extent to which spend upon net wages is with employees living again with the local Mid & East Antrim area.</p>
Round 3	<p>Re-spend of local contractors/suppliers and employees</p> <p>Round 3 has sought to identify the re-spend of LEDCOM’s supply chain with respect to their own suppliers and employees. The focus of this round of spending has been upon the extent to which LEDCOM suppliers and employees re-spend their income within Mid & East Antrim. To identify re-spend, NBEI surveyed how much LEDCOM’s top 10 suppliers re-spend annually in Mid & East Antrim in terms of their own respective salary and employee expenditure. On the recommendation of the New Economic Foundation—the study also discounted some of the large multi-national firms that were on the supply list as well as organisation’s that were listed being based outside of Northern Ireland. This choice was made as it would be unlikely that such organisation would have any such re-spend in the Mid & East Antrim council area. To calculate what the remaining firms re-spend in Mid & East Antrim this study has also used a proxy which was provided by the for Local Economic Strategies (CLES). CLES have carried out consultancy work adopting the LM3 methodology for a total of 22 local authorities across the UK and recently completed a similar enquiry of Belfast City Council in 2015 to help them better understand their procurement practices. Over the past ten years, CLES has also completed similar work for a number of local authorities across Northern Ireland which has led them to develop a sensible proxy for re-spending across the province.</p>
LM3	<p>Calculating the Local Multiplier 3 (LM3)</p> <p>Once all the data had been collected and analysed, the following formula was used to calculate the local multiplier effect for LEDCOM:</p> $LM3 = \frac{Round\ 1 + Round\ 2 + Round\ 3}{Round\ 1}$ <p>Where Round 1 = (total expenditure) Where Round 2 = (spend on local contractors and suppliers and spend on local direct employees) Where Round 3 = (re-spend by contractors and local suppliers and local employees of their own + local re-spend by local and non-local employees)</p>

3 Measuring the economic impact of LEDCOM

3.1 Calculating the total income and expenditure of LEDCOM

Round 1 of this study explores the total expenditure of LEDCOM which includes spend upon contractors and suppliers, gross employee wages, and overheads. For the purpose of this enquiry, NBEI has examined the annual expenditure of LEDCOM based on financial data taken from 2015/2016. This comprised of £500,000 on gross employee salaries and £234,713.40 on suppliers, overheads and other contractors which provided an expenditure total of £734,713.40.

3.2 Mapping LEDCOM spend with local contractors and suppliers

Round 2 of this study explores the extent to which an organisation's supply chain is made up of local businesses and the scale of spend with these suppliers. For LEDCOM Figure 2 breaks down the organisations expenditure with firms located from different council areas across Northern Ireland.

Figure 2 LEDCOM's expenditure across Northern Ireland council areas

Council Area	Suppliers per Council Area	%	Total Annual spend per Council Area (£)	%
Mid & East Antrim	70	48.95	124,283.83	52.95
Belfast	23	16.08	27,611.16	11.76
Antrim and Newtownabbey	16	11.19	16,581.14	7.06
Mid Ulster	3	2.10	14,518.17	6.19
Causeway Coast and Glens	5	3.50	6,122.47	2.61
Newry Mourne and Down	1	0.70	817.00	0.35
Lisburn and Castlereagh	2	1.40	553.33	0.24
Fermanagh and Omagh	1	0.70	540.00	0.23
Derry and Strabane	1	0.70	299.88	0.13
Armagh Banbridge and Craigavon	1	0.70	240.00	0.10
North Down and Ards	1	0.70	235.00	0.10
Outside NI	19	13.29	42,911.42	18.28
Total	143	100.00	234,713.40	100.00

Figure 2 also demonstrates that 52.96% of LEDCOM's annual expenditure on suppliers and contractors flows back into the Mid & East Antrim area. This equated to £124,283.83 of spend across a total of 70 businesses or organisations. The majority of LEDCOM's supplier spend (87.71%) was retained domestically although the organisation does procure goods and services from outside Northern Ireland. This mostly includes subscriptions to software packages and accounting management systems such as SAGE. To better understand the geography of LEDCOM's supply chain NBEI produced a map (Figure 4) to represent the size and postcode of all LEDCOM's suppliers during the 2015/2016 financial year.

3.2.1 LEDCOM's supply chain by business classification

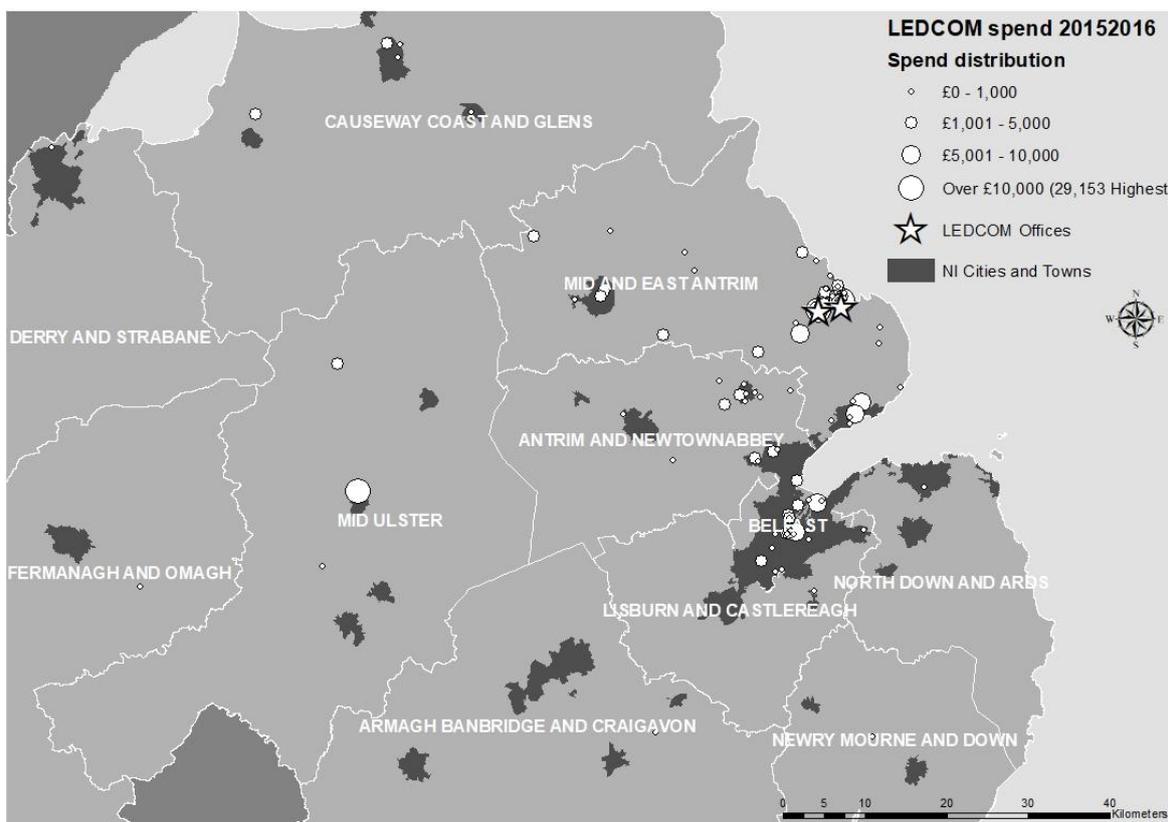
Figure 7 provides a breakdown of LEDCOM's supply chain in terms of business classification. Based on 2015/2016 supplier data LEDCOM traded with 17 other social enterprises, charities or non-profits across Northern Ireland. This equated to a supply chain value of £38,754.72 per year and 16.51% of its supplier expenditure. Some of these social

enterprises, charities or non-profitable organisations were based locally in the Mid & East Antrim area and included Chain HR

Figure 3 Breakdown of LEDCOM's supply chain in terms of business classification

Supply chain breakdown	Suppliers	%	Supplier spend by social/non social enterprise	%
Social Enterprise	17	11.89	38,754.72	16.51
Non Social Enterprise	126	88.11	195,958.68	83.49
Total	143	100	234,713.40	100

Figure 4 LEDCOM's supplier expenditure across Mid & East Antrim and beyond



NBEI's supply chain analysis demonstrates that LEDCOM is not only attempting to buy local and support business located in the Mid & East Antrim area. But they are also buying social and looking to develop supply chains with other social enterprises that are also operating across Northern Ireland's community and voluntary sector. In the context of the Strategic Investment Board's emerging 'Buy Social' Toolkit, this demonstrates that LEDCOM are subscribing to the buy social ethos and are looking to incorporate high levels of social value across their procurement practices.

Figure 5 shows how 10.79% of LEDCOM's annual spend flows to suppliers who operate in the Top 20% wards when ranked using the Northern Ireland Multiple Deprivation Index. In 2015/2016 this accounted for £25,325.42 which was spread across 23 different suppliers.

Figure 5 LEDCOM's supplier expenditure by wards ranked by deprivation

Electoral Wards ranked by NISRA MDM score	Suppliers per MDM ward	%	Supplier spend by MDM band (£)	%
Top 20%	23	16.08	25,325.42	10.79

Between 20% - 40%	32	22.38	55,963.94	23.84
Between 40% - 60%	13	9.09	16,459.98	7.01
Between 60 - 80%	20	13.99	16,493.53	7.03
Between 80% - 100%	36	25.17	77,559.11	33.04
Outside NI	19	13.29	42,911.42	18.28
Total	143	100.00	234,713.40	100.00

Figure 6 provides a list of LEDCOM's Top 10 suppliers in terms of expenditure and shows how 9 out of the 10 are based in Northern Ireland. Rexel UK Ltd (LEDCOM's top supplier) currently accounts for nearly 15% of the organisation's annual expenditure (£29,153.04) and is located outside Northern Ireland.

Figure 6 LEDCOM's Top 10 suppliers in terms of expenditure 20152016

Top 10 LEDCOM suppliers	Social Enterprise	Location	Total spend	Percentage
Rexel UK Ltd	Non Social Enterprise	non-NI	29,153.04	15.20
Chain HR Ltd	Social Enterprise	NI	24,158.06	12.60
Dawson Whyte (Larne)	Non Social Enterprise	NI	17,820.90	9.29
Go Power	Non Social Enterprise	NI	11,003.17	5.74
PricewaterhouseCoopers LLP	Non Social Enterprise	NI	9,228.00	4.81
GSL IT.com	Non Social Enterprise	NI	9,119.23	4.75
Philip Martin Cleaning Services	Non Social Enterprise	NI	8,350.00	4.35
Oasis Design Studio	Non Social Enterprise	NI	5,836.00	3.04
Flogas Natural Gas Ltd	Non Social Enterprise	NI	5,832.77	3.04
Agape Communications	Non Social Enterprise	NI	5,591.67	2.92
APH Services NI Ltd	Non Social Enterprise	NI	5,461.20	2.85

3.3 Mapping LEDCOM's salary expenditure

Round 2 of this study also explores the extent to which LEDCOM's employee supply chain is made up of local residents combined with annual net spend on those employees. For the purpose of this enquiry NBEI have analysed LEDCOM salary data with respect to a range of geographies that include the Mid & East Antrim council area, Antrim and Newtownabbey and Northern Ireland.

3.3.1 Mapping LEDCOM salary expenditure by geography

Based on 20152016 payroll data, LEDCOM spent £500,000 gross on 10 full time members of staff. In net terms, this amounted to £348,000. Figure 7 breaks down LEDCOM's salary expenditure by geography and shows that £243,60 net (70%) was spent on employees who were resident in the Mid & East Antrim Council Area whilst £104,400 net (30%) was spent on employees that were resident in the Antrim and Newtownabbey Council Area. This shows that all LEDCOM areas are based domestically in Northern Ireland.

Figure 7 LEDCOM expenditure upon employee wages by geography

Geographic area	Employees per Area	%	NET employee spend per Area (£)	%
Mid & East Antrim	6	75.00	243,600.00	70.00
Antrim and Newtownabbey	2	25.00	104,400.00	30.00
Northern Ireland	8	100	348,000.00	100
Total	8	100	348,000.00	100

3.4 Mapping the personal expenditure of LEDCOM employees

Round 3 of this analysis explores the extent to which the money spent by LEDCOM employee wages is then re-spent by employees themselves back into the Mid & East Antrim and Antrim and Newtownabbey area respectively. NBEI have explored the extent at which LEDCOM employees re-spend their wages based upon a range of activities which included household rent, childcare, shopping, transport and the use of the local entertainment provision (shops, services, restaurants and other leisure activities). The survey was completed by all 8 LEDCOM employees, which represented a response rate of 100%.

3.4.1 Surveying the spending habits of LEDCOM employees

Figure 8 details the cumulative findings for LEDCOM employees that answered the survey. The analysis is broken down by the geographical residence of employees and the amount which they re-spend in the local Mid & East Antrim and Antrim and Newtownabbey Council area respectively. Mid & East Antrim residents responding to the survey collectively re-spent £170,520 a year back into the Mid & East Antrim area, which is equivalent to 70p in every £1 spent. Non Mid & East Antrim Council residents re-spent £20,880 which is equivalent to 20p in every £1 spent.

Figure 8 Re-spend of surveyed employees in Mid & East Antrim/Antrim and Newtownabbey

Area	Survey's completed	Total salary spend (net) (£)	Mid & East Antrim salary re-spend (£)	Proportion of spend in Mid & East Antrim
Mid & East Antrim	6	243,600.00	170,520.00	£0.70
Non Mid & East Antrim	2	104,400.00	20,880.00	£0.20

In contrast, Antrim and Newtownabbey residents re-spend £78,300.00 into their local council area which is equivalent to 75p in every £1 spent. Non Antrim and Newtownabbey council residents collectively re-spent only £21,924.00 which is equivalent to 9p in every £1 spent.

Area	Survey's completed	Total salary spend (net) (£)	Antrim and Newtownabbey salary re-spend (£)	Proportion of spend in Antrim. and Newtownabbey
Antrim and Newtownabbey	2	104,400.00	78,300.00	£0.75
Non Antrim and Newtownabbey	6	243,600.00	21,924.00	£0.09

3.5 Mapping the re-spend of LEDCOM suppliers

In addition to mapping the re-spend of LEDCOM employees, NBEI completed round 3 of this enquiry by calculating how much of LEDCOM's supply expenditure is then re-spent back into Mid & East Antrim through its suppliers. In consultancy it would be standard practice to independently survey all 143 of LEDCOM's suppliers and ask them to calculate what proportion of their income is re-spent in the locality on both employees and suppliers. NBEI attempted a similar methodology but were unfortunately confronted with suppliers who:

- 1) Were unwilling to discuss their finances

- 2) Could not provide an accurate amount or estimate re-spend figure
- 3) Refused to respond to the survey or return contact to NBEI.

To complete this part of the enquiry NBEI therefore had to make the following allowances. These were based on advice and recommendations from consultants based at CLES (Centre for Local Economic Strategies) and NEF (the New Economics Foundation) who have over 10 years experience in using this methodology to evaluate the economic impact of local authorities and organisations from across the UK.

- On the advice of consultants from NEF, NBEI have discounted entirely any re-spend from suppliers who could be classified as multi-national or large scale national level organisations. It has also attributed zero re-spend to suppliers that are located outside of Northern Ireland, as the likelihood of these businesses re-spending in the Mid & East Antrim area is very slim.
- In 2015 CLES completed a similar study for Belfast City Council and based upon a wide body of work completed from across the UK and Northern Ireland they were able to provide a proxy which could help estimate the level of re-spend back into Mid & East Antrim. The proxy of 17p in every £1 was then assigned to every supplier who did not respond

Based on these findings and utilising the proxies provided by CLES, Figure 9 shows how Mid & East Antrim based suppliers re-spent £75,442.92 back into the local council area whilst non Mid & East Antrim based suppliers re-spent £7,980.07. Collectively this equalled total of £83,422.99 re-spend back into the local area which was equivalent to 36p in every £1 spent.

Figure 9 Re-spend of all LEDCOM suppliers in Mid & East Antrim

Area	Total LEDCOM suppliers	Total spend (£)	Mid & East Antrim supplier re-spend (£)	Proportion of spend in Mid & East Antrim
Mid East Antrim	70	124,283.83	75,442.92	£0.61
Non Mid East Antrim	73	110,429.07	7,980.07	£0.07
Total	143	234,713.40	83,422.99	£0.36

4 Final LEDCOM expenditure totals

Figure 10 presents all 3 rounds of LEDCOM expenditure, the LM3 ratio and the % of LEDCOM expenditure that was retained in Mid & East Antrim based on accounts data taken from the 2015/2016 financial year.

Figure 10 Summary of all three rounds of LEDCOM's expenditure in Mid & East Antrim

LEDCOM expenditure	Round Totals (£)	Mid & East Antrim based payroll employees and suppliers		Non Mid & East Antrim based employees and suppliers	
		Net spend In Mid & East Antrim (£)	Net spend out of Mid & East Antrim (£)	Net spend In Mid & East Antrim (£)	Net spend Out of Mid & East Antrim (£)
Total spend (R1)	734,713.40				
Direct payroll spend (R2)	348,000.00	243,600.00			104,400.00
Direct supplier spend (R2)	234,713.40	124,283.83			110,429.57
Total direct expenditure in Mid & East Antrim (R2)		367,883.83			
Local payroll re-spend (R3)	191,400.00	170,520.00	73,080.00	20,880.00	83,520.00
Local supplier re-spend (R3)	83,422.99	75,442.92	48,840.91	7,980.07	102,449.50
Total re-spend in Mid & East Antrim (R3)	274,822.99	245,962.92		28,860.07	

LM3 ratio for LEDCOM and the Mid & East Antrim Council Area	1.87
Percentage of LEDCOM expenditure retained in the Mid & East Antrim Council Area after analysing 3 rounds of annual employee and supplier expenditure	37.41%

These findings present a LM3 ratio for LEDCOM of 1.87. In simple terms this means that for every £1 invested by LEDCOM, an additional 87p is spent or re-spent in the Mid & East Antrim area. In 2015, CLES used the same methodology to calculate the multiplier effect of Belfast City Council. The findings of this study illustrated that for every £1 invested into the council 70p is spent or re-spent in the Belfast City Council Area and 96p is spent or re-spent in Greater Belfast. The findings also show after 3 rounds of spend calculations, 37.41% of LEDCOM's annual expenditure (both on salaries and suppliers) is retained in the Mid & East Antrim Council Area. In the 2015/2016 this equated to £274,822.99.

Finally NBEI developed the LM3 analysis to calculate how much LEDCOM reinvests back into Northern Ireland's wider social economy. Figure 11 shows that in the 2015/2016 financial year 52.64% of LEDCOM's expenditure flowed into activities (job posts, suppliers, contracts, service level agreements etc) that could be categorised as belonging to the social economy. In simple terms, for every £1 invested into LEDCOM, 53p is reinvested back into Northern Ireland's social enterprise. This amount is impressive, especially given the current scale and scope of the sector and the limited procurement opportunities currently available.

Figure 11 LEDCOM re-spend into the social economy

Total LEDCOM expenditure = £734,713.40
Net LEDCOM salary expenditure = £348,000.00
Other social enterprise expenditure = £38,754.72
Total amount of LEDCOM expenditure retained in the social economy = £386,754.72
Percentage retained in the social economy = 52.64%