

Mat-11 Local Sourcing

POINTS AVAILABLE **2**

AIM OF CREDIT

To encourage and recognise the environmental advantages gained, in the form of reduced transportation emissions, by using materials and products that are sourced within close proximity to the site.

CREDIT CRITERIA

Up to two points are awarded independently as follows:

One point is awarded where:

- 20% of the total contract value is represented by materials or products that have been sourced from within 400 km of the site;

One point is awarded where:

- 10% of the project's total contract value is represented by materials or products that have been sourced from within 50 km of the site;

Only materials or products permanently installed on the project site are eligible and must have been extracted, harvested, recovered, as well as manufactured within the above mentioned radii of the site in order to qualify for the credit.

Mechanical, electrical and plumbing components and specialty items such as elevators and equipment are excluded completely from the calculations of this credit - both local materials value and total contract value. The following components, equipment and specialty items must be excluded from the total contract value calculations for MAT-11 Local Sourcing:

- All Heating, Ventilation and Cooling (HVAC) plant components incl. duct work;
- All Electrical equipment and components incl. light fixtures & fittings and distribution boards;
- All Plumbing system components incl. piping, duct work and sanitary fittings & fixtures
- Lifts;
- Building Management System (BMS) components and;
- Generators.

DOCUMENTATION REQUIREMENTS

Green Star SA – Office Design	Green Star SA – Office As Built
<p>Submit all the evidence and ensure it readily confirms compliance.</p> <ul style="list-style-type: none"> • Short report • Extract(s) from tender documentation • Quantity Surveyor report • Statement of confirmation (1) 	<p>Submit all the evidence and ensure it readily confirms compliance.</p> <ul style="list-style-type: none"> • Short report • Statement of confirmation (1) • Statement of confirmation (2)

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Short report prepared by a relevant project team member that describes how the Credit Criteria have been met by:

- Providing a tabulated list of all materials and/or products which are claimed as compliant with the Credit Criteria;
- For each material/product, detailing the manufacturer/supplier, all points of origin, extraction and manufacture with distances to site with reference to supporting documentation
- Providing calculations that demonstrate that the total estimated value (Design) or total actual value (As Built) of the products/materials from within the specified radii account for the percentages required of the Credit Criteria, with reference to supporting documentation.

Extract(s) from tender documentation clearly demonstrating the contractual requirement for the sourcing of specified products and/or materials which are demonstrated as compliant with the Credit Criteria, and the associated quantities, as referenced in the short report;

Quantity Surveyor report estimating the total material value of the products/materials from within the specified radii as a percentage of the project's total value

Statement of confirmation (1) from supplier(s) for each material and/or product claimed, in the form of signed correspondence confirming, the location of the material/products' extraction, harvesting, processing and/or manufacturing, and (As Built only), the quantity supplied to the project

Statement of confirmation (2) from the Contractor, in the form of signed correspondence confirming:

- For all materials and/or products claimed compliant, the manufacturer/supplier of the material/product, the quantity installed within the project; and
- The material value of compliant materials/products as a percentage of the project's contract value.

ADDITIONAL GUIDANCE

Sufficient proof must be provided showing all points of extraction, harvesting and processing, and that all these points fall within the allowable radii from the project site.

A suitable professional is to make an informed decision as to when using locally sourced yet higher impact materials are more environmentally beneficial than importing lower impact materials from further afield. This needs to be looked at holistically in the context of the entire project to ensure that the greatest overall benefit is achieved.

If only a fraction of a material or product has been extracted, harvested, recovered and manufactured locally, then only that percentage of the material (by weight) shall contribute to the value of that material for consideration in the local sourcing credit. The cost of the product must be pro-rated based on proportionality of the weight of the various components. For example, the allowable percentage of the cost of concrete containing imported components would be the weight of the locally extracted and manufactured components divided by the total weight of the concrete mix.

In the case of reused or recycled materials or products, the location from where the material was salvaged/recovered for reuse or recycling shall be equivalent to 'point of recovery,' and for reused materials, the location of final vendor shall be considered the 'point of manufacture.'

The material cost is determined as the total cost of materials which must include transport/shipping costs to the site, but must not include installation cost, equipment for installation, contractor fee, contingencies or any other amounts.

Fill material/bulk earthworks sourced on site, or sourced within close proximity to the site, may contribute to the credit. It has been determined that it is common practice to source a non-negligible

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proportion of fill material from sources not within close proximity to the project site. Furthermore, bulk earthworks sources are highly variable, depending on project type and building typology. Given this, the inclusion of fill material/bulk earthworks satisfies the intent of the credit criteria and project teams are to be encouraged to source these materials locally.

BACKGROUND

It has been well established that in limiting the haulage of materials, and thereby reducing the transportation emissions, one can achieve vast improvement in the environmental impact of a project. Other indirect implications of local sourcing include boosting the local economy by supporting local industries and keeping money in the region, quicker delivery times and reduced transportation costs.

The Beddington Zero Energy Development (BedZed) in the UK put emphasis on sourcing as many products and materials locally as possible. Most of the heavy materials required for construction were sourced locally, whilst lighter more specialist materials came from further afield. 52% of the materials (by weight) were sourced within a 55km radius of the project site.

The results achieved at BedZed were compared, for both distance-by-volume and distance-by-weight measures, to national average haulage figures for similar buildings using the same materials but with average origin distances. The results for BedZed came in at 18% below average for distance-by-volume, and 40% below average for distance-by-weight.

A transport distance saving of 65km per tonne of material was achieved, which equates to a saving of 120 tonnes of CO₂ emissions. This is equivalent to the CO₂ burden of 10 people for a full year.

The choice to source materials and products locally does not in itself lead to any additional costs or staff time, and can therefore be an effective and sustainable policy in reducing a projects footprint.

REFERENCES & FURTHER INFORMATION

Beddington Zero Energy Development: Construction Materials Report Part 1, Nicole Lazarus, Bioregional Development Group.

<http://www.bioregional.com/Materials%20report%20web%20cut%20final%20draft.pdf>