

**Name:** MAKAR  
<http://makar.co.uk/>

**Place:** Inverness

**Headline :** An architect-led ecological design, manufacture and build company specialising in the use of Scottish timber

**Keywords:** house-building; ecological; design and manufacture Scottish timber;

**What is the context?** The company is the product of a progression by architect Neil Sutherland, pursuing his interest in the use of native timber from design, the delivery process to house-building and on towards community; and a whole culture which cherishes the quality, utility and authenticity of this resource.

**What was the initial aim?**

Neil set out with a purpose and a set of values about wood as a natural, clean, home-grown material which can be used to build beautiful, healthy, comfortable, safe, cosy homes where people feel happy. He wanted to pursue a consistent ethic of quality and customer-led design.

**What actually happened and what has been achieved?**

Neil started the company as an extension of his architect's business and it grew well beyond any original expectations in response to market demand. Hugely admired by its clients, it continues to grow, now embarking on the building of whole larger multiple house developments designed for integrated communities. It builds the kind of houses which enhance people's lives, and in doing so the company is also contributing to a new Scottish house-building tradition, a workforce with the skills and passion to develop it, and a kind of organisation which reflects these values in the way it serves its clients and treats its employees as a collaborating team. Using their own 'closed-panel' system they are able to pre-fabricate each house in the workshop so construction on site takes only a few days. They want to bring this use of home-grown timber increasingly into the mainstream, making houses that are healthy, low carbon, adaptable and attainable, counteracting assumptions that this a privileged niche. MAKAR is now part of a cluster of designers and builders and component suppliers in the Highlands and Islands with a deep interest in timber.

**Evidence of outcomes**

The company now has an off-site manufacturing workshop in Inverness with 30 employees and a £3.5m annual turnover, building about 15 houses a year. Timber growers are increasingly seeking the company out as a customer for their timber. Clients have formed a Facebook group to share the joy the feel at living in a Makar home. The staff say their lives are changed by the experience of working in an organisation with strong ethical principles, paying them well, and with a commitment to nurturing their skills. The company is also pioneering new manufacturing techniques in the use of home-grown timber in building, and encouraging the big mills to supply products of a consistent quality for building, but progress is slow compared to practice on the continent especially in south Germany, Austria

& Switzerland.

### **What factors contributed to those outcomes?**

A creative lead individual; a good deal of blood sweat and tears; a shared belief in quality and the principle of using the material we have in Scotland, and to make the commissioning process joyful rather than stressful for the client. It was also serendipity that the growth of the company coincided with (as well as contributing to) a general increase in awareness of the benefits of timber and the downsides of using materials which are imported, involve high carbon emissions in their manufacture, and/or have a tendency to out-gas noxious chemicals.

However, the company's growth has not been well resourced, so progress and investment has had to follow the profit curve, rather than drive it. The biggest difficulties are the huge growth of planning and building standards regulation (to control bad practice) which adds little or no value when applied to quality operators, and the indifference of the academic community (with one notable exception of Edinburgh Napier University) to the ground-breaking research potential in this area.

### **How replicable is this experience; what is its potential as an element of a better approach to forestry?**

Neil believes this approach has wide applicability in an industry desperately needing to improve its skill levels and to prioritise the needs of the client rather than leave the client coping with whatever the builder chooses to supply on a cost-efficiency basis. A wider adoption of building with home grown timber would stimulate investment in our domestic land economy and encourage timber growers to strive for quality.

### **What might the indicators / metrics be that help to tell this story at a wider level?**

Client satisfaction levels; expert reviews; growth of demand; employee stories; volumes of home-grown timber used; number of jobs created; pattern of growth of this company and others in the sector.

### **Key messages:**

- this is a good way to build houses for our own citizens, supporting a home timber industry and creating living spaces which meet all the client's needs.
- MAKAR has demonstrated the principle. Support is needed to address the barriers and help the growth of this sector.
- Innovation needs pioneers to explore opportunities.
- Quality house building is not just about the material and the product, it's about the way we work, increase our skills, treat each other, live together.
- Building with wood is different; wider adoption needs fresh attitudes with a willingness to collaborate to tackle challenges.
- Ineffective and poorly considered regulation impedes progress. Successful countries (and business sectors) find ways of resolving problems more effectively and efficiently than over-regulation.
- A policy commitment is needed to timber solutions to the local and national public procurement of buildings. In timber culture countries such as throughout Scandinavia, buildings large and small are procured from local timber; this is simply not thought of as relevant here.

- Given that two thirds of the standing timber resource of the UK is in Scotland we could have a distinct policy landscape on public procurement (whether for low carbon economy, support for forestry and rural interests, increased energy performance, support for home-grown materials & components etc).
- The recently constructed UHI building in Inverness is full of steel, concrete, stone (sourced from China), and very little in the way of regionally sourced materials. In mainland Europe a large building of this type would be constructed from timber, its structure, finishes and fit-out. An even modest move in this direction would clearly advantage those involved in the forestry, processing, design and manufacture sector.
- At present there is no recognition in the Building Standards (Scotland) Acts, of the benefit to domestic buildings of timber, let alone locally sourced timber. Carbon reduction is largely addressed by way of “eco-bling” (Howard Liddell) solar collectors from China or wherever.