Figures & Tables for BioBuild Final Report

Figure 1. Biotex Flax from Composites Evolution

Figure 2. Resin bonded cork crumb panel from Amorim Cork Composites to be used as a core material

Figure 3. Jute-biopolyester sample as moulded (left) and after 12w accelerated weathering (right) to illustrate the need for a weather resistant coating on the biocomposites.

Figure 4. Result of a preliminary feasibility trial showing the effect of uncontrolled steam production during the cure of polyfurfuryl alcohol laminates with a cork core.

Figure 5. The first version of a small scale EWP. The later design used a loose fill insulation and the through thickness ribs were removed to reduce thermal bridging.

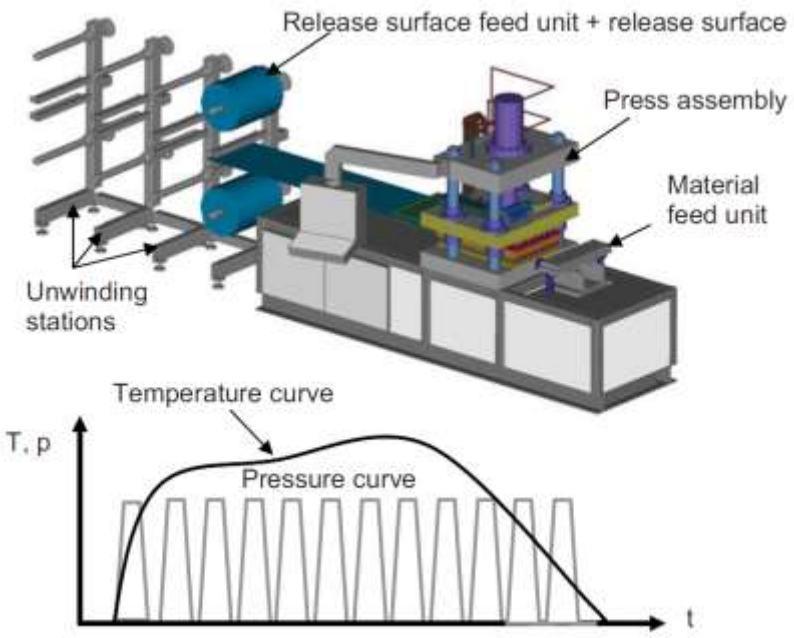
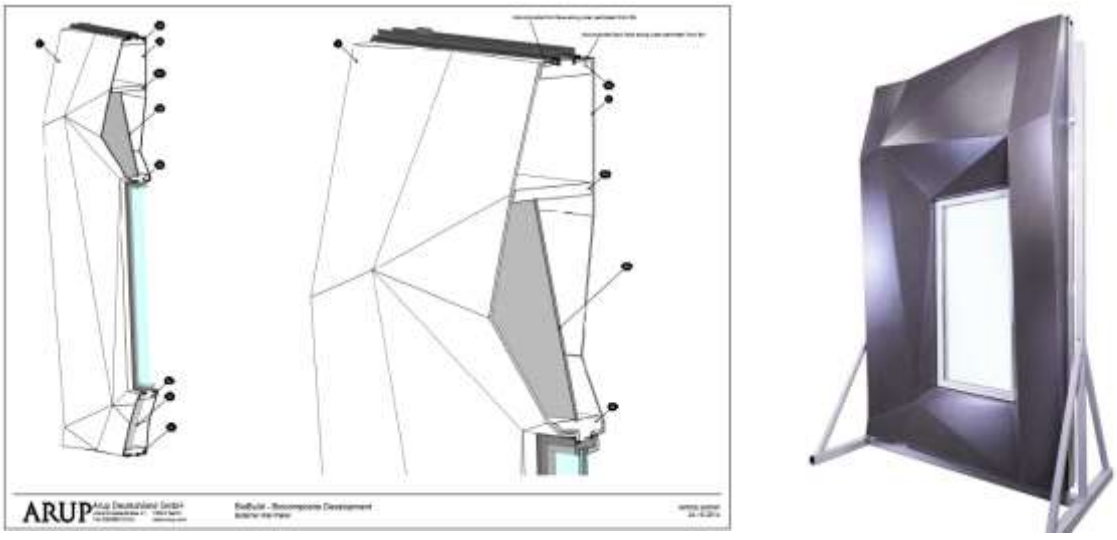
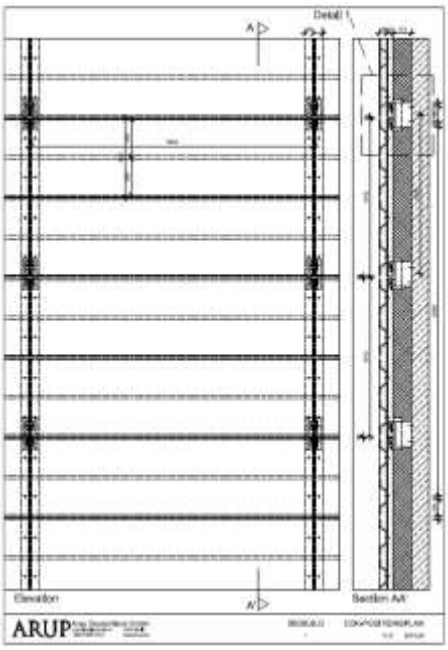


Figure 6. The semi-continuous compression moulding process



(a) (b)

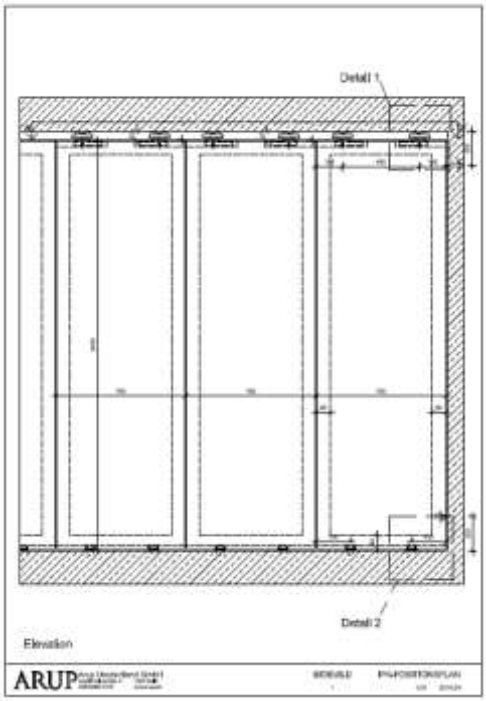
Figure 7. Detailed drawings (a) for the External Wall Panel and its final appearance (b).



(a)

(b)

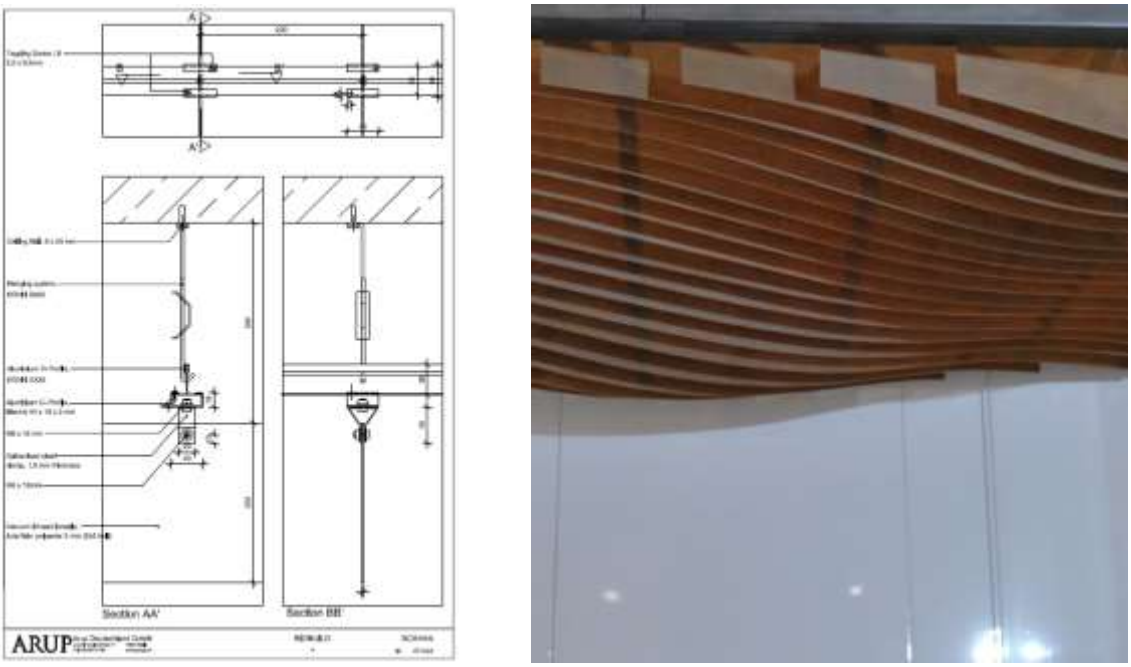
Figure 8. Detailed drawings (a) for the External Cladding Kit and its final appearance (b).



(a)

(b)

Figure 9. Detailed drawings (a) for the Internal Partition Kit and its final appearance (b).



(a) (b)

Figure 10. Detailed drawings (a) for the Suspended Ceiling Kit and its final appearance (b).

Figure 11. Uncoated furan-flax (cork core) sandwich panel (right: damaged surface after end of test)

Figure 12. Furan-flax sandwich panel (as in Figure 11) coated with intumescent coating system (left) subjected to an SBI test (centre) showing surface intumescence after end of test (right).

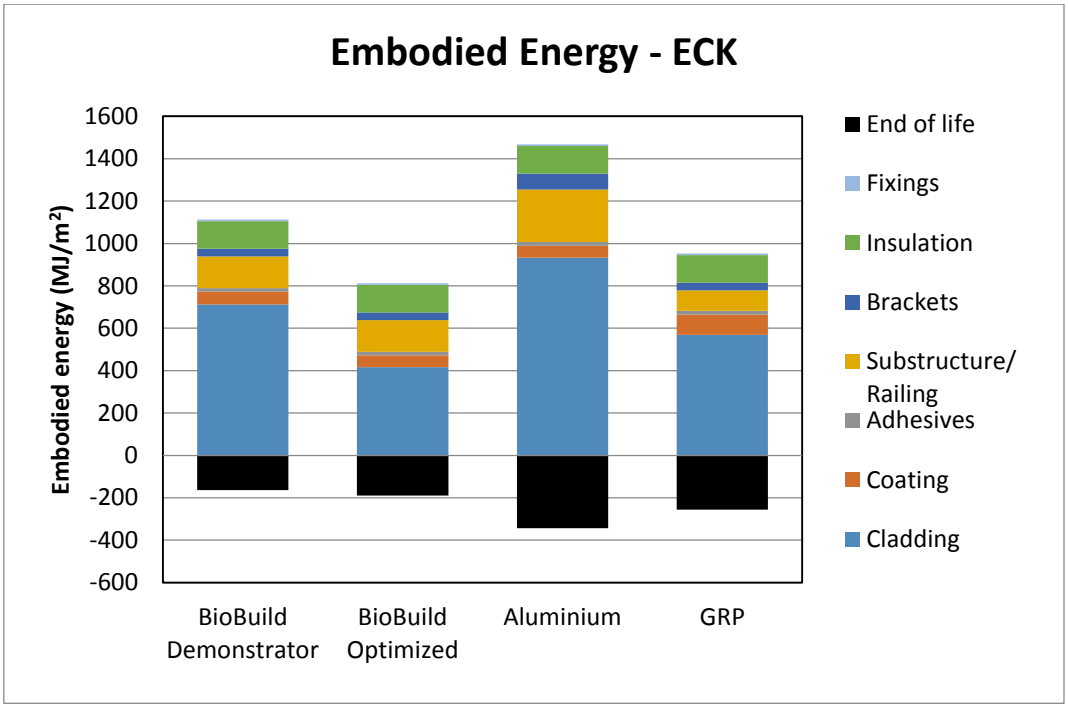


Figure 13. Embodied energy (non-renewable energy) of the ECK variants, shown on a component level. End-of-life impacts of all components are shown in black, separated from score of the components themselves.

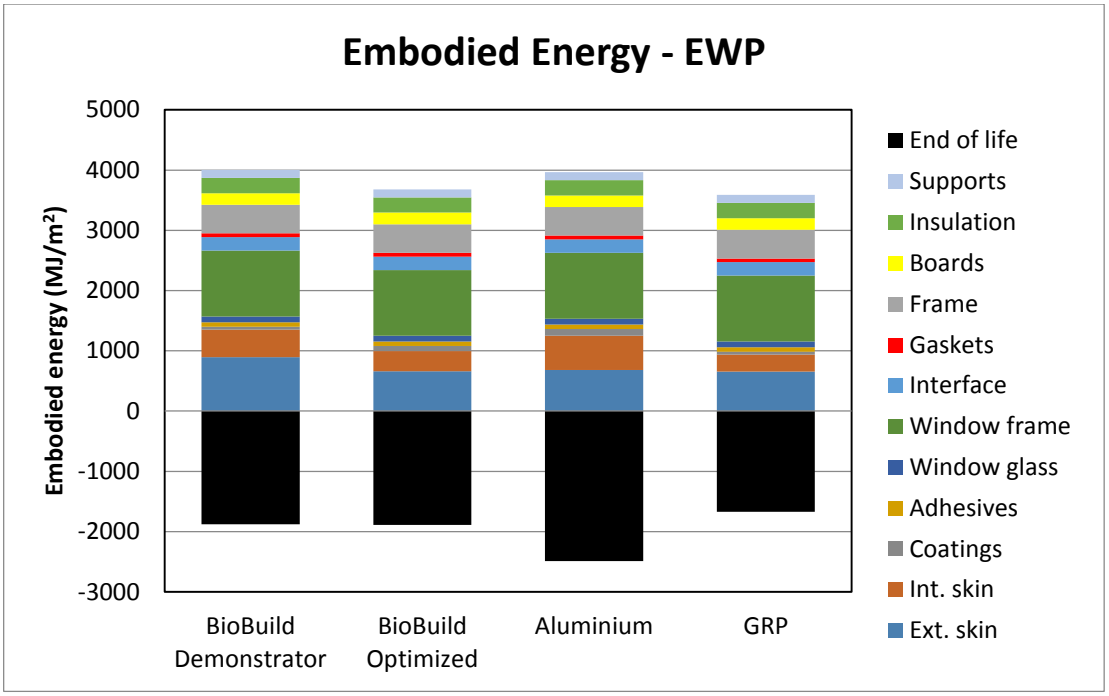


Figure 14. Embodied energy (non-renewable energy) of the EWP variants, shown on a component level. End-of-life impacts of all components are shown in black, separated from score of the components themselves.

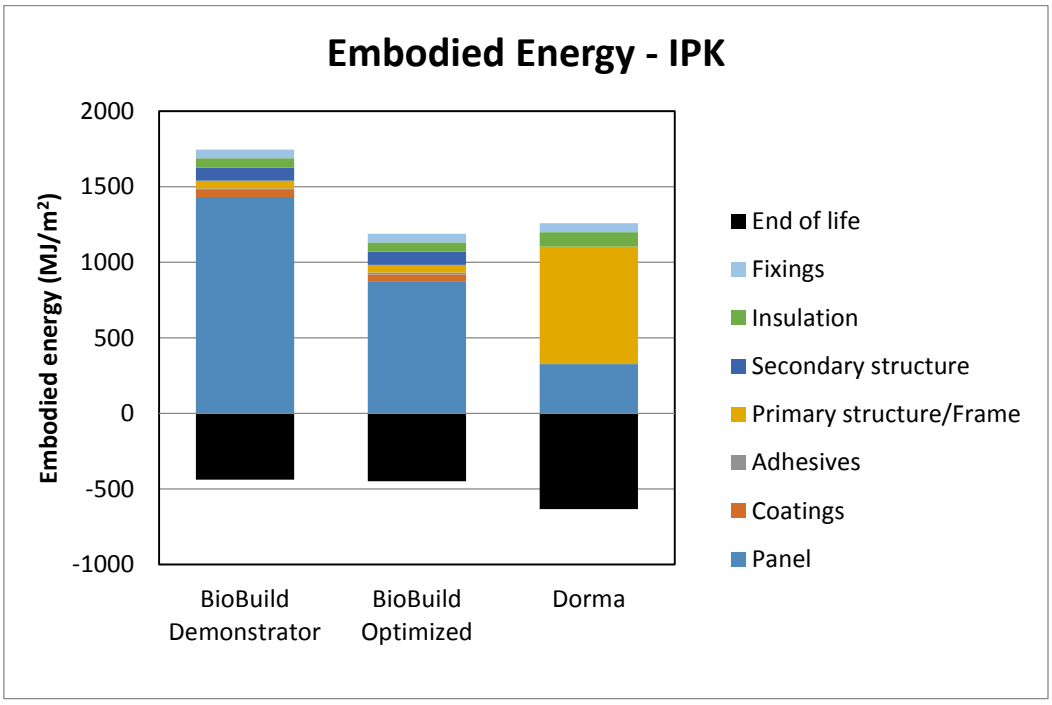


Figure 15. Embodied energy (non-renewable energy) of the IPK variants, shown on a component level. End-of-life impacts of all components are shown in black, separated from score of the components themselves.

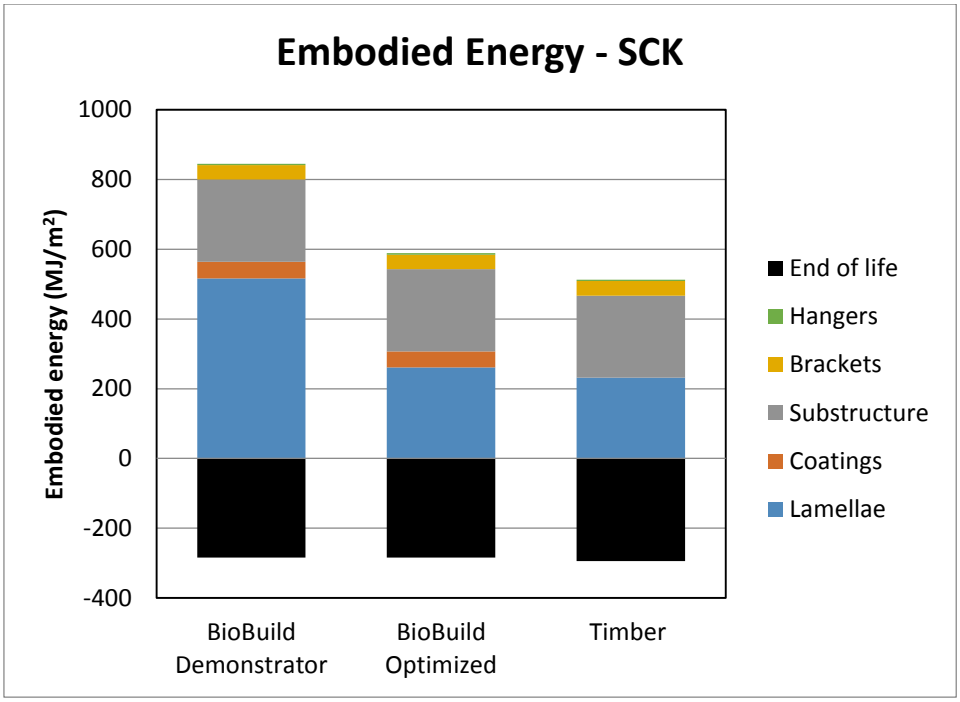


Figure 16. Embodied energy (non-renewable energy) of the SCK variants, shown on a component level. End-of-life impacts of all components are shown in black, separated from score of the components themselves.

Figure 17. The BioBuild stand at EcoBuild.

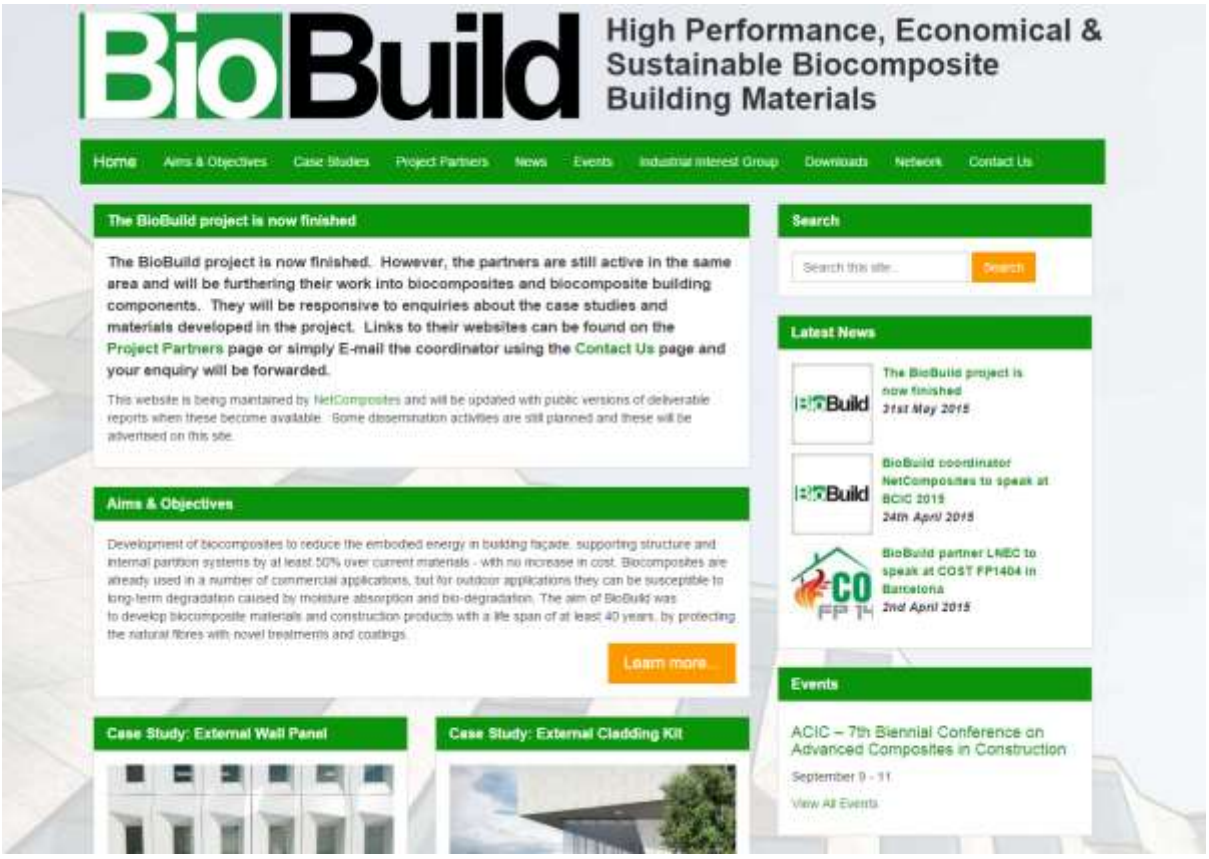


Figure 18. The BioBuild website (www.biobuildproject.eu) from which is intended to inform the public about the project & allow them to download related documents.