



Allcompound®

The aim of **SiS international** is to create joint venture projects in Farming, Electricity, Housing, Road Bulding in western and developing countries. Address Practice Centrum: Wageningen University ASG Boksumerdijk 11 Goutum Friesland.

Allcompound International Holding BV Joint venture was initiated in the Netherlands

08 – 08 - 2008

Contents:

1. What is Allcompound®?.....3

2. Qualities.....4

3. Flexibility in Applications.....5

4. Constituents of Allcompound®.....6

5. Neutralization of Toxic Products.....7

6. Large-Scale Production.....9

7. Benefits.....10

8. Historical Examples.....11

9. Business Possibilities.....12

10. About SiS International.....13

11. Partners.....15



ALLCOMPOUND®

Allcompound® is a Cradle-to-Cradle building material. It can be used instead of cement multi-purposefully in construction industry in more than 90 applications.

Allcompound-made objects possess characteristics of adjustable strengths which can vary enormously: from Very lightweight, Wood-like material that can float on water and can be processed like wood; till very heavy concrete-like applications in foundations, bridges and buildings.

Allcompound® can be used in:

1. Housing
2. Infrastructure of roads, tunnels, dams, windmills, water basins
3. Utility buildings
4. Soil cleaning and sewage treatment

Depending on application, it can be made porous like a sponge or strong as concrete. In all cases, it will never rot, decompose or burn.

QUALITIES

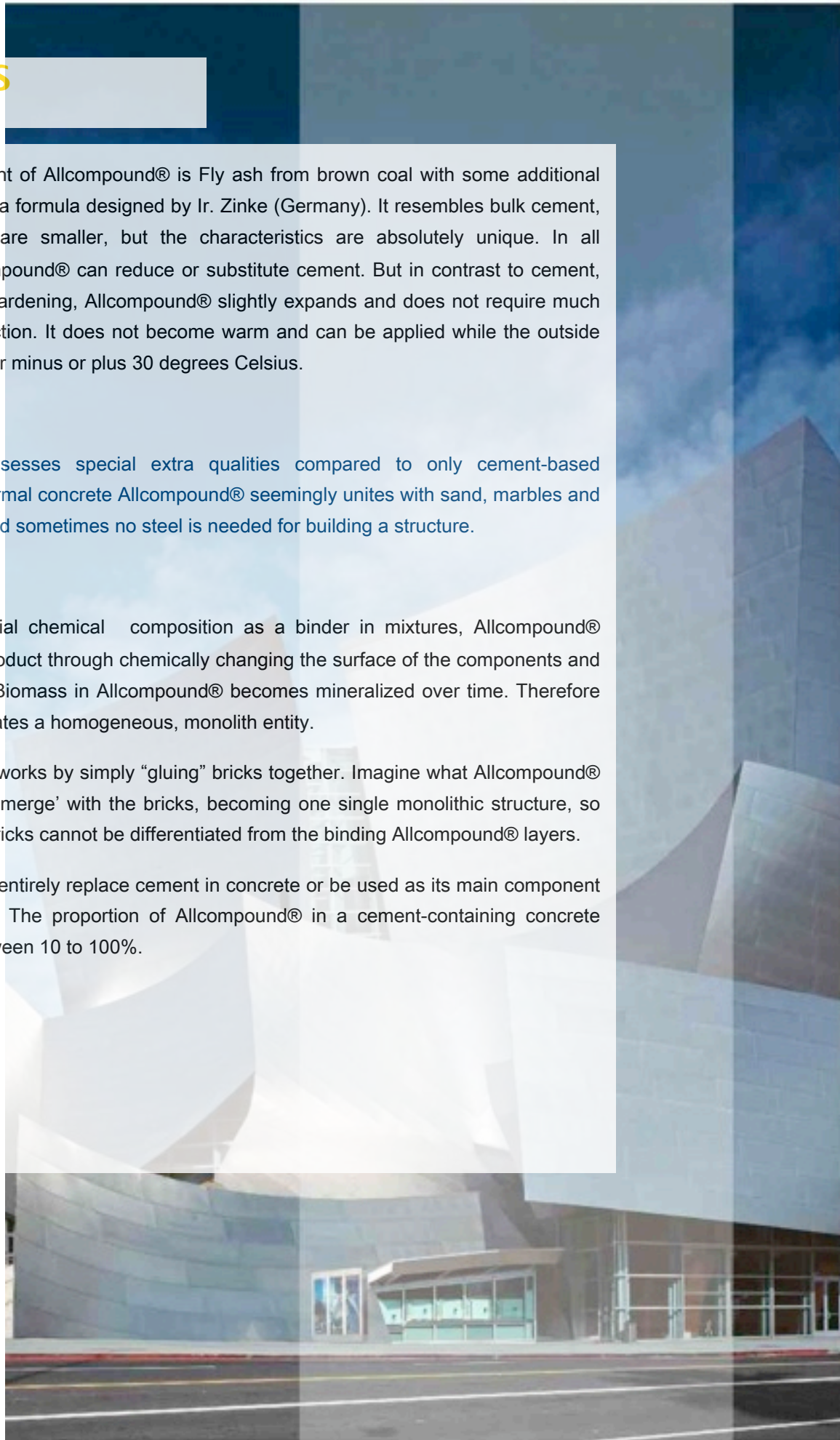
The main constituent of Allcompound® is Fly ash from brown coal with some additional materials based on a formula designed by Ir. Zinke (Germany). It resembles bulk cement, only the particles are smaller, but the characteristics are absolutely unique. In all applications, Allcompound® can reduce or substitute cement. But in contrast to cement, that shrinks while hardening, Allcompound® slightly expands and does not require much mechanical compaction. It does not become warm and can be applied while the outside temperature is either minus or plus 30 degrees Celsius.

Allcompound® possesses special extra qualities compared to only cement-based concrete. Unlike normal concrete Allcompound® seemingly unites with sand, marbles and steel so that less and sometimes no steel is needed for building a structure.

Thanks to its special chemical composition as a binder in mixtures, Allcompound® creates a stable product through chemically changing the surface of the components and 'unites' with them. Biomass in Allcompound® becomes mineralized over time. Therefore Allcompound® creates a homogeneous, monolith entity.

Recall that cement works by simply "gluing" bricks together. Imagine what Allcompound® would do: it would 'merge' with the bricks, becoming one single monolithic structure, so that mechanically bricks cannot be differentiated from the binding Allcompound® layers.

Allcompound® can entirely replace cement in concrete or be used as its main component with some cement. The proportion of Allcompound® in a cement-containing concrete mixture can be between 10 to 100%.



FLEXIBILITY

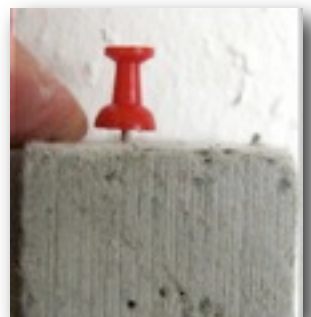
The wide range of possible new construction materials based on Allcompound® will prove to be invaluable for the industry. Allcompound® can be molded into imitation of wood, marble, granite, bricks, or pavement stones. The range of possibilities is immense.

At the same time, the characteristics of each of these end-products based on Allcompound® remain identical to the authentic material.

For example, wood is largely used in buildings like museums, nursery homes, hospitals, schools, military complexes, libraries. The product cast from Allcompound® looks like wood, has mechanic characteristics like wood so it floats on water, can be sawed and nailed like wood. Butit cannot rot and, more importantly, it cannot burn. It is categorized as one of the few A0 Materials that can replace Styropor, MDF and Gypsum.

Inflammable doors, floors, roofs and therefore inflammable secure buildings are possible with Allcompound®. Even more so, these buildings will be water and earthquake resistant.

It does not take much effort to imagine what the environmental, economic and social potential value this material is.



CONSTITUENTS

Allcompound® is manufactured by mixing lignite's fly ash (LFA) and additional materials (activators and additives). LFA is a residual substance of the burning of lignite in power stations. Nowadays most of the LFA is not being used as a valuable material, but is being stored with corresponding expense on dumps or opencast holes. LFA is the main component of Allcompound® which makes it exceptionally strong, resilient, water and heat-resistant. Depending on the desired application, the content of LFA can be varied from 60% up to 99%. As the composition of LFA depends on the mining area, different additional materials must be used in different quantities. The formulas and application fields are the result of 40 years long-standing research by Ir. Bernhard Zinke from Cottbus.

In 1996 lignite was mined on every continent except Africa, e. g. in Germany (166m. tons), the USA (78m.tons), Australia (66m. tons), Turkey (63m. tons), India (23m. tons), as well as in Poland, Czech Republic, Greece, Rumania, Bulgaria, Yugoslavia, Spain, Hungary, Canada, Russia, Uzbekistan, China, Thailand. The quantity of Lignite worldwide amounted to ca. 950 million tons.

In all above-mentioned countries, LFA is available because of the use of Lignite in power stations in the above mentioned countries.

The quantity of LFA worldwide is approximately 100-150 million tons a year.

It is possible to produce Allcompound® in all countries, but especially in those where lignite fly ash is available.



NEUTRALIZATION OF TOXIC PRODUCTS

As the pores in the freshly-made Allcompound® mixture close the component itself creates a sealing-system with an extremely high water resistance (if necessary up to 10,000 times more than water-proof concrete).

Thanks to this characteristic, harmful substances can be bound durably and strongly by the binding system and thus be neutralized. Allcompound® can be applied to almost all types of liquid, pasty and solid materials, e. g. all sorts of sand (also desert and sea sand), garden mould, natural manure, sewage sludge, unresolved industrial and household sewage, combustion residual, building waste, oil, plastic and textile waste, chemicals, other residual materials, wastes and all contaminants with the characteristics compared e.g. to mercury.

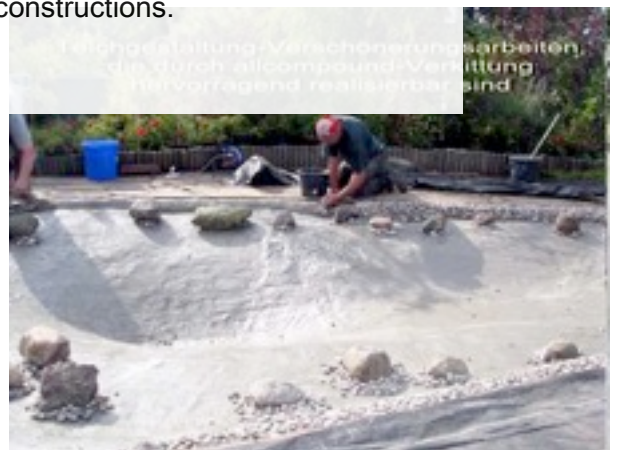
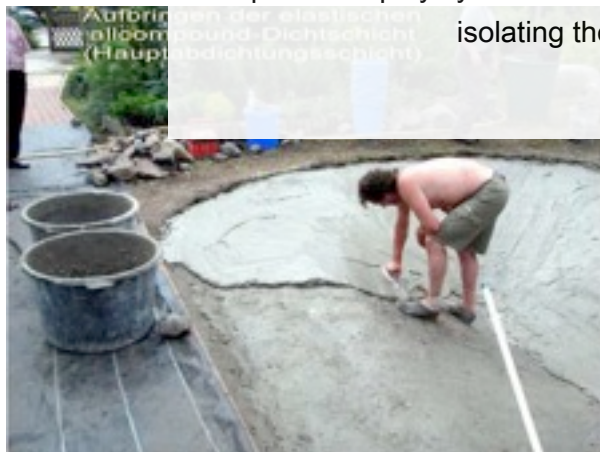
By the selection of different additives a defined quality for particular application can be tailored.

Through a chemical process Allcompound® mineralizes, alters characteristics of and binds biomass material like sewage, grasses and so forth.





Allcompound® can be directly administered on sand without plastic as water impermeable and isolating bases for all types of cellars. No expandable polystyrenes like styropor and peripor are necessary for isolating the built constructions.



LARGE SCALE PRODUCTION

Allcompound® is delivered to the building site as bulk material like cement and sand so that it can be molded into virtually any form or shape for transportation. Using the same equipment as with making concrete from cement.

Therefore Allcompound® can be manufactured using conventional processes and equipment. The only adaptation is a different curve in hardening processes. The early hardening time is longer but this can be corrected with chemical additions so that in fact no adaptation changes in ordinary cement-utilizing factories are necessary to establish large-scale production. The technical equipment used in the manufacture of concrete can therefore be used to produce Allcompound® without significant investment in modifications.



Leeuwarden
35 km

BENEFITS

- Project costs of construction materials go down ca 30% - 70%
- Constructions have longer durability
- Constructions are stronger, more flexible and require less support like e.g. steel spikes
- The constructions cannot burn
- The constructions can be perfect isolators from heat or cold
- Water and humidity-resistant constructions can be accomplished with higher quality at cheaper price, for example in cellars in residential housing
- Engineering costs of underwater constructions, such as drilling platforms in oil industry, go down
- Construction elements made of Allcompound® become CO₂ – neutral, so a new added value in construction is generated
- Less costly and more efficient way for removing overspill toxic substances in the environment becomes available to companies
- Technical boundaries of architectural designs are being shaken as constructions from Allcompound® can be given virtually any shape and form. New bold, unique, original, sophisticated designs become possible



HISTORICAL EXAMPLES

It may come as a surprise, but Allcompound® has a long history of use. In some non western and therefore culturally and economically not easily accessible countries Allcompound® was used to resolve local problems and help cope with industrial calamities. Often since resources were very limited. This means that the features of Allcompound® have been tested and tried out not only in the laboratories, but foremost in challenging real-life situations.

Here are some historical prototype examples of application of Allcompound®:

- Production of hydraulically bound road layers without any bounding of harmful materials on the more than 20 km roads near Cottbus (Germany);
- the bounding of harmful materials at the Saspow's dump (Germany);
- Injectional solidification in tunneling in Switzerland;
- Application of sewage/natural manure-substrate on the test areas of Federal institute of Biology in Berlin;
- Water basin in the section of polar bears in zoological garden in Dresden, a pond of approximately 1000 m²
- Application as sealing mass by reconstruction of buildings in Eberbach near Heidelberg and in Cottbus; Sealing of sport areas (tennis courts, running tracks), parking station of 3,000 m² in Cottbus.
- The construction of a house 80% build from Allcompound® was accomplished some years ago. This is the house where the inventor of Allcompound, Ir. Zinke, lives himself.



BUSINESS POSSIBILITIES

Mr. Ir Bernhard Zinke and collaborators have filed some 92 Patents many of which have expired, some were broken, some still exist and some 20 will be new.

Nevertheless there is no real possibility for copying the compound because Mr. Zinke and his team have all confidential prescription know-how for the manufacturing and application of Allcompound® .

To date the official representative of Monum Art and Mr. Zinke for International business deals is the company [Sustainable Innovative Solutions International \(SiS\)](#), Ltd, based in the Netherlands and represented by Michaël & Johannes Krens and representatives. SiS officials constitute a new Allcompound International Company.

Through SiS the outlines of new joint ventures and licenses can be discussed.

The company will offer and teach customized, "tailor-made" solutions for all applications. Whether it is in the field of civil engineering, flood protection or sewage treatment.

It is possible to produce Allcompound® in all countries especially those where lignite fly ash is available. This presents a big chance for each construction company and investor. If you are interested please do not hesitate and contact SiS International or Allcompound International.



The aim of SiS international is to create joint venture projects in Farming / Electricity / Road Building / Housing in western and developing countries.

Sustainable techniques and projects must be directed towards energy conservation, cultural preservation, regional self-sufficiency, social development and ecological sustainability.

The cluster of techniques:

1. Food and biomass production with Prof. Staender's Subterranean Plant Supply System (SPSS);
2. On-site Briquetting machine;
3. 1.5 MW and 7.5 MW plants for biomass to electricity and liquids;
4. Installations of biomass to electricity and heating / cooling with Stirling motor for small firms and households;
5. Biomass to housing processes;
6. Water electricity & water clearance systems;
7. Allcompound® Lignite Fly Ash in construction and other industries.

Starting projects: Tanzania, South Africa, Iran, India, Netherlands, Germany, Poland, Kazakhstan; Russia; Argentina, Indonesia, Singapore, China.

Partners in joint ventures: Multinational Organizations; Governmental and Non - governmental Organizations; Banks; Universities; Local businesses, Local farmers organizations or Local women self-help organizations.

SiS COMPANY INFO



INTERNATIONAL OFFICE

SiS International
Postbox 43008
3540 AA Utrecht
The Netherlands
T +31 (0) 308 795 448
e-mail info@sustainableinnovations.org

GERMANY

SiS Germany
Goethestrasse 95
01365, Guben, Germany

Ir.G.H. Franke
Director
e-mail Geha.franke@online.de

Ir H. Wetzel
Co-director
e-mail howetzel@t-online.de

NETHERLANDS:

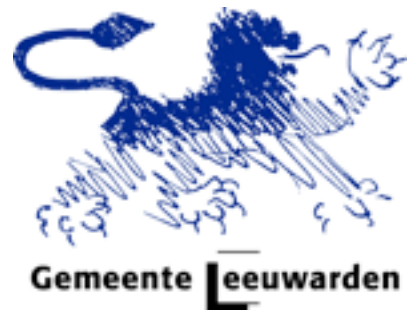
Drs. Johannes Krens
General Manager
M +31 (0) 653376461
e-mail jkrens@sustainableinnovations.org

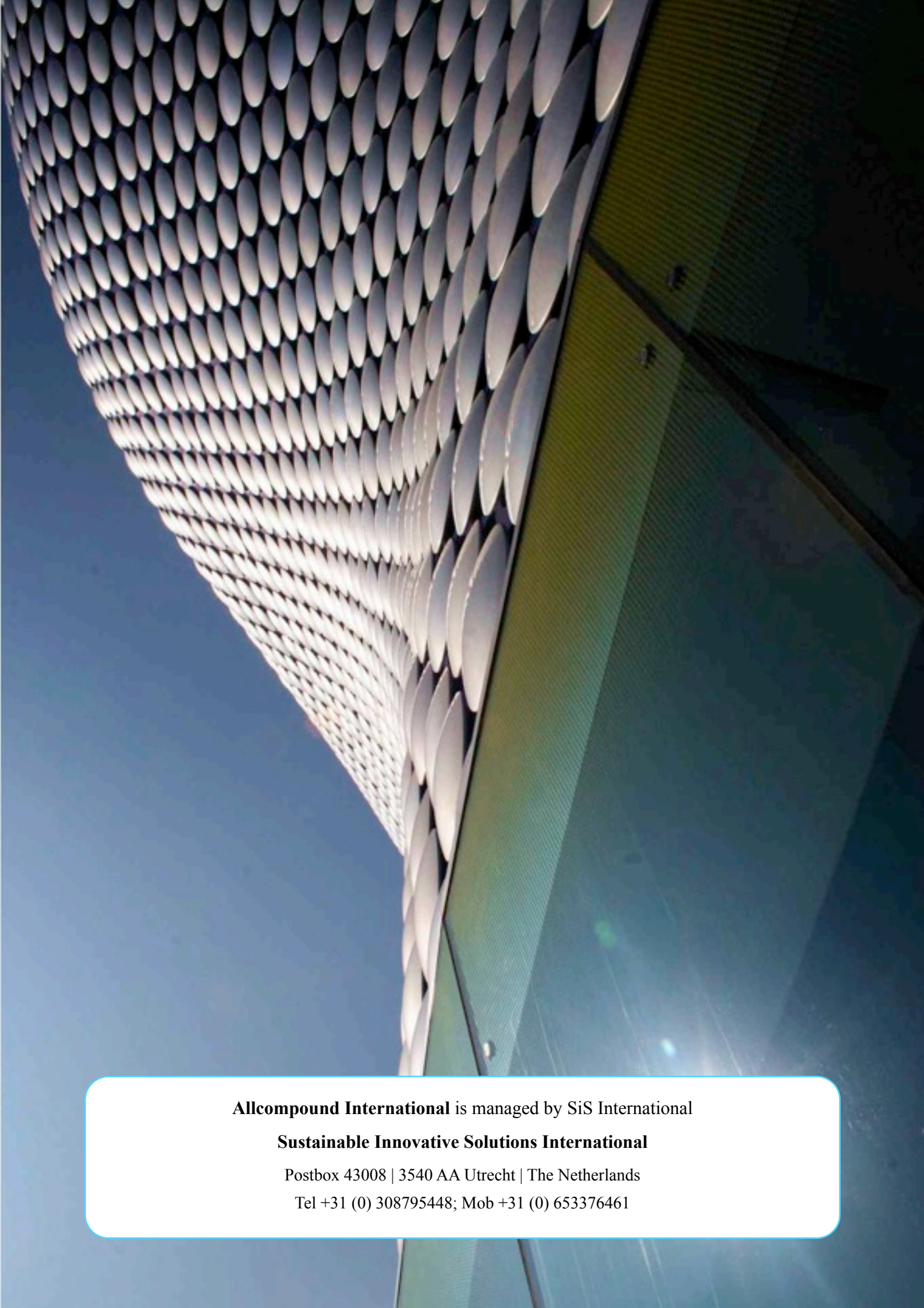
BSc M.S. Krens
Director
M +31 (0) 617144946
e-mail mkrens@sustainableinnovations.org

BSc P.F. Stadhouders
Energy Consultant
M +31 (0) 624570159
e-mail pstadhouders@sustainableinnovations.org

Kamer van Koophandel No. 30232980;
VAT No. NL818795803B01

PARTNERS





Allcompound International is managed by SiS International

Sustainable Innovative Solutions International

Postbox 43008 | 3540 AA Utrecht | The Netherlands

Tel +31 (0) 308795448; Mob +31 (0) 653376461