The Problem:
- In average, refugees and victims of natural disasters stay in temporary accommodation for more than 11 years
- Therefore short term accommodation is not sufficient, what we need are houses with a long lifetime that allow an adequate lifestyle and functional buildings like shops, schools, hospitals, offices and workshops – not only tents.
- Existing techniques are either expensive, heavy and bulky or do not offer an adequate standard for long term living.

PMF Housing is a social entrepreneurship offering a superior solution:
Pre-fabricated modules (floor, walls, roof) are brought to the site, zipped together and then filled with polymer foam*

Polymer-Foam houses combine the advantages of tents with the strengths of fixed buildings

<table>
<thead>
<tr>
<th>Material</th>
<th>Ease of transport</th>
<th>Cost to build</th>
<th>Logistics</th>
<th>Re-usability</th>
<th>Lifetime / Durability</th>
<th>Weather resistance</th>
<th>Good standard of living</th>
<th>Design flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>high</td>
<td>medium</td>
<td>high</td>
<td>low</td>
<td>high</td>
<td>high</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>Foam</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>high</td>
<td>low</td>
<td>high</td>
<td>low</td>
<td>high</td>
</tr>
</tbody>
</table>

Assembly begins with a temporary framework...

... then the elements for walls, roof and floor are zipped together...

... then the gap between the outer and the inner lining is filled with polyurethane foam, and the framework gets removed.

A 6x6m standard house is suitable for a family of 4 - 6

Polymer-Foam-Houses are superior to other techniques as they offer:
- **Low costs**: Approximately €7,000 - to 10,000 per house = €200 – 300 per m², approximately €100-150 per person per year
- **Ease of transport**: Low weight ca. 1500 kg/house (= ca 50kg/m²), low volume: ca. 240m² living space fits in a 20ft container
- **Pre-fabrication**: Fast construction of a large number of houses
- **Durability**: Weather proof, non rotting, stable, earthquake-proof, fire retardant, well insulated, comfortable and hygienic.
- **Modular design**: A small number of modules for a large variety of buildings: Homes, schools, (work)shops, hospitals, offices
- **Design flexibility**: Wide range of humanitarian and commercial applications (e.g. warehouses, workshops, budget housing)
- **Good standard of living**: integrated floor, vertical walls, high ceiling, dry, insulated, heated, good ventilation, good size
- **Environmentally friendly**: Low heating/cooling demand, low emissions, no rotting, very good recyclability

* Assumption: 30m²: 4 People; 20 years lifetime

Our goal: JV with a manufacturer of shelters to set up a new product line

We are supported by:
- Investors and supporters for financing and implementation
- Industrial Partners for a Joint Venture, a co-operation, technical cooperation/support
- Cooperation with Aid Organizations to ensure buildings are fit for purpose
- Governmental support (Municipalities, States, Federal)