

Housing association:		Date:	
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Resident:		Interviewed by:	
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I feel excited every time I drive past the airport and think “that’s where my building comes from”

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Your experiences and answers as a resident of one of the recycled apartments will contribute unique knowledge about the importance of recycling building materials from the users' perspective. This experience was naturally not part of the initial projects and will thus complement and provide a natural round-up.

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Would you be interested in a follow-up video interview about experiences with the recycled apartments? The interview will probably be published online eg on Realdania's and the housing association's website and possibly on YouTube.

No	Question	Answer		Golder remark
0	Resident	Resident 1	Resident 2	
	Date	03.03.2021	04.03.2021	
	Representative	Resident 1	Resident 2	
	Interviewer	Gustav Gansted	Maria Ekblad and Gustav Gansted	
Generally				
1	How long have you lived in the property?	1994 (since construction)	Start: 1 June 1998 => housing new => previous resident.	

2	Were you /your family aware that the building was built as a demonstration project with recycled materials when you moved in? If so, did it play any role in choosing a home?	Yes, written up on the resident list while the building was under construction. Very attractive with a sustainable background for the construction, well thought out.	1995 => FSB => Happy about all homes where it stood => recycled materials - can't see that they are recycled materials.	
3	Were you aware, before we contacted you about this project, that you lived in one of the recycled apartments? If so, can you deepen your knowledge?		Small real estate office => owner (Frank Østergaard => supervisor of FSB - construction) =>Frank tells where the materials come from (fun to hear).	
Environment				
4	If yes to question 2/3: Has your knowledge of the recycled materials in your home had an impact on any own renovations or replacements in your home? If so, can you elaborate on the influence?	No, no renovations, planning a new kitchen. Does not play a role.	Not rebuilt much. Lighting/electricity in rooms.	
5	What extent of renovations in your own home do you know about and what was the reason for the renovation? Cost?		Floor sanding Have chosen social housing because of not having to do the construction project myself.	
6	What extent of future renovations in your own home do you have plans / wishes for and what was the reason needed? Cost?		New kitchen (old was worn) We are happy that the housing association looks after the building but does not have an interest in redevelopment.	

7	<p>Do you have knowledge of renovation of reused/recycled building parts carried out by the housing association? Cost?</p>	<p>Stair tower, cracks, exterior No knowledge of anything other than regular maintenance, roof repair</p>	<p>Heating tank Maintenance on the woodwork Post-insulation on the roof.</p> <p>=> Stair tower => sentence damage => iron in the stairs.</p> <p>Planned: maintenance from residents that the identity of the building is maintained by renovating reused/recycled building parts using "new" recycled materials.</p>	
8	<p>What is your experience of the durability/condition of the recycled/recycled building materials in your home?</p>	<p>General wear and tear</p>	<p>The building does not seem recycled => positive. In-depth knowledge of 85 other homes Portugalgade, Amager (construction from the same time). Feel in day-to-day life that there is nothing wrong with the apartment.</p>	
9	<p>What is your experience of the durability/condition of the recycled/recycled building materials in the housing association in general?</p>	<p>General wear and tear</p>	<p>Not changing building parts, but ongoing maintenance. Stair tower (10 years ago), setting, iron-fired iron and building, stair level. No descaling/cracks in masonry/water damage</p>	

10	What is your experience of the indoor climate in your home?	Good climate, pleasant, a bit on the dry side. Very little sound.	<p>Uses heat, low humidity passing temp. Jetties on the floor.</p> <p>=> live on 5. floor TH.</p> <p>No condensation in people's windows</p> <p>The wall facing konggade 16 => not completely covered by the valve in the wall window.</p> <p>Very good indoor climate, low humidity. A few thermal bridges at the entrance. Warm and nice.</p> <p>No moisture in windows, the valve in windows and walls, mechanical ventilation.</p>	
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Social				
11	Is sustainability and climate considerations in general something that fills your / your family's everyday life? If so, can you elaborate on the meaning?	Consciously, but does not take up so much time. But more over the years.	<p>Living sustainably</p> <p>Multi-storey dwelling (87m2) => heated on 2 (max. 3) sides (as opposed to a house)</p> <p>Consumption of heat, building materials, electricity... => work close to the dwelling, transport reduced.</p>	

12	What value does it have for you/your family to live in one of the recycled apartments?	Very happy to stay here, central, bright, a "village feeling"	<p>I look forward to every time I drive past the airport and think "where my place comes from"</p> <p>Tells guests - has a value, is proud => nice with demonstration.</p> <p>Glad that materials from the former villa neighborhood have been used for my apartment. Funny that materials come from local demolition instead of being thrown out.</p>	
13	How do your experiences of living in the recycled apartments affect your life? Future thoughts/requirements for recycled materials/sustainability in construction?		I live in a building that can last a long time.	
14	Do you have any knowledge of whether living in the recycled apartments is something that makes a difference for the other residents?	No, not knowledge. Not negative, only a good thing.	<p>Resident meetings => often mention Acceptance and happiness Residents happy and (especially younger people) socially proud</p> <p>Renewed recognition/enthusiasm in telling the history of the building to new residents.</p>	

15	Has living in the recycled apartments had an impact on the role of recycling materials in your personal life?	No.	<p>Has often been mentioned at resident/department meetings. Can feel joy in recycled materials. Joy of new residents and increased joy over the years. No annoyance over recycled materials.</p> <p>Frank Østergaard (former operations manager and property manager) told stories about where the materials came from - demolished homes in connection with the motorway to Sweden.</p> <p>Itt. that when FSB builds new, to have become curious about whether FSB has drawn on experience from DGH and more in new construction.</p> <p>FSB very focused on climate in day-to-day operations.</p>	
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Housing association:		Date:	
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Operator:		Interviewed by:	
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Proposal for a presentation interview for operations managers

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Would you be interested in a follow-up video interview about experiences with the recycled apartments? The interview will probably be published online e.g. on Realdania's and the housing association's website and possibly on YouTube.

No.	Question	Answer			Golder remark
	Operations Manager	Odinsgaard, Horsens - Vimmelskiftet	Civica, Odense	FSB	

0	Date	01.03.2021	02.03.2021	05-03-2021	
	Representative	Manager, Operations Manager and Inspector	Property Inspector, Retired Property Inspector, Property Master	Manager	
	Interviewer	Maria Ekblad and Gustav Gansted	Maria Ekblad and Gustav Gansted	Gustav Gansted	
Generally					
1	How long have you been associated with the housing cabinet?	Respectively: Operator: since 2013 Operations Manager: since 1994 Operational Inspector: since 2007.	Inspector: since 2019 Inspector (pensioner) 30 years as inspector => until 2014 when	Approx. 5.5 years (6 years to August)	
2	What is your work function?	Operations Manager: Responsibility for operations Operations inspector: operation, maintenance, renovation	See answer q. 1.	Operations Manager, operations department in inner Nørrebro (13 departments)	
3	Were you aware before you started that in the housing association's portfolio there was one of the recycled apartments? If so, can you expand on your knowledge?	Andrew and Kennet: No. Bent: yes, he was the building constructor during construction.	Thomas: No Jørgen: Yes - was there from the very beginning. Søren: No	No	

4	Were you aware before the inquiry regarding this project that there was one of the recycled apartments in the housing association's portfolio? If so, can you deepen your knowledge?		Through talks with retired property inspector (internal knowledge sharing) Retired property inspector: There was a lot of showcasing at first, then it stopped.	Named the recycled housing in FBS system.	
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Environment

5	What extent of renovations have been carried out on the recycled apartments and what has been the reason for the need?	Replacing windows 2020 => the south exterior => not recycled => brand new => not protected => no replacement of recycled materials.	The floors were oil treated => hard to maintain. Painted exterior = ongoing repair and painting, as with new materials. New plaster (south) => on facades => General wear. Repair of fungus in wood in the stairwell. Fought with fungicide for 15 years. Not sure if it was because of recycled materials => changed 5 kitchens (out of 14) => because people wanted new (the body itself intact).	There have been no major renovation works, other than ongoing maintenance, including mold cleaning in the basement corridor.	
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6	Have "new" recycled materials been used in connection with: renovation works?	No	New windows planned for 2025 Usually changes windows after 30 years, recycled wood immediately very durable. Mature tree when harvesting. Very fond of roof (slate).	No	
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7	What extent of future renovations is planned at the recycled apartments and what is the reason for the need?	None planned	5 kitchens replaced (damage is still there) - Will get a handle on which ones. Windows 2025, painted facades though, not roof.	Plan (30 years) allocated funds for ongoing maintenance. Ordinary wear of build. Repair of damage to exterior (plaster) and bricks that have gone into disrepair.	
8	What is your experience of the durability/condition of the recycled/recycled building materials in the housing association in general?	No problems with materials - same maintenance. Exteriors => plastered => same as with all other buildings.	Fine durability of windows. No problems, only small ones.	"Tired" windows , overhaul maintenance of mortar and roof around windows. Has nothing to do with the materials being recycled.	
9	Has your knowledge of the recycled building materials influenced the way the building is run?	No - "Business as usual".	No special considerations.	No presumption that the materials are inferior to new materials.	
10	Has your knowledge of the recycled building materials influenced the way the building is maintained and renovated?	No.	No special considerations.	No, maintenance like other buildings	
11	Have the recycled building materials played a role in choosing products for ongoing cleaning and maintenance, e.g. paint?	No.	Floors are lightly sanded (3x varnish), all homes (originally oil-treated). Old floorboards are turned by recycling.	No noticeable difference. Attitude not related to recycled concrete.	

12	Have the recycled building materials played a role in the choice of materials and construction methods for renovations?	No.		No	
13	Has a condition assessment previously been prepared similar to individual building elements or the building as a whole?	Annual mode duration => internally of operations.	No	2018, has been given the basis for the 30-year plan.	
13	Has an energy label/energy inspection etc. been prepared for the building?	Yes, energy audit (<10 years old). Has been sent.	Energy label => sent		
14	Have the recycled building materials and the experiences from the recycled apartments in general had an impact on your possible work with other buildings of the association ?		Only recycled-operating materials, but overall sustainable thinking.	No, tasks related to general service concepts.	
Economy					
16	Is there an overview of the average annual operating budget for the recycled apartments?	Operation - maintenance budget. Latest budget sent.	Approx. 145,000 annually for the past 5 years incl. white goods (washing machine).	Have got.	
15	Is the operating budget for the recycled apartments different from your other buildings because of the recycled building materials?	Like the others.	Immediately slightly lower than average.	Does not use more operating funds.	
16	Is there an overview of the costs associated with renovations carried out at the recycled apartments?		Cf. maintenance plan => sent	Have got.	

17	Is there an overview of budgeting expenses for future renovations at the recycled apartments?		Cf. maintenance plan => sent	Have got.	
18	Is there an overview of the building's heat consumption and	Heat consumption + costs sent.	60,000 annually => sent	Have got.	
Social					
19	What does it mean to you to work with the daily operation and maintenance of the recycled apartments?	On an equal footing with other buildings => Pride.	Positive that the good materials have been used instead of just being discarded.	No debugging.	
20	Has your knowledge of the recycled building materials had an impact on the wellbeing of your work in connection with the recycled apartments?	No	No	No impact on work	
21	Do you have any knowledge of whether living in the recycled apartments is something that makes a difference for the residents? For example, a wellbeing survey.	Doesn't mean much to residents.	Most people don't know. No knowledge. Not sure if everyone knows it's recycled.	Yes, I think they talk about it, and it plays a bigger role for some people.	

22	<p>Has your work with the recycled apartments had an impact on the role of recycling materials in your personal life?</p>	<p>No</p>	<p>Start: used materials for new kitchen for 29 years, used brick beams, etc.</p> <p>1990, Sept. (about halfway through construction), excited about how it would go, much attention.</p> <p>Residents: Lived there for many years and took good care of things, good unity (closer in the past).</p> <p>Conscious of recycled materials, but not essential for home choice.</p>	<p>Followed construction projects, among other things, eg houses with shells, reeds, straws, etc.</p> <p>Interesting that you can build both climate and allergy friendly and at the same time sustainable.</p> <p>A shame that there hasn't been more development of sustainability and recycled construction in the last 25 years. Too bad that the building is only followed up 25 years later and that, for example, there has not been continuous follow-up every 5 years to record ongoing experiences with the durability of the materials.</p>	
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Housing association:		Date:	
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Representative:		Interviewed by:	
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0	Housing association	FSB	
	Date	02.03.2021	
	Representative(s)	Administrative manager	
	Interviewer	Maria Ekblad and Gustav Gansted	
Generally			
1	How long have you been associated with the housing cabinet?	From 2010	

2	What is your work function?	2010-2017 Managing Manager at inner Nørrebro 2017 Operations Manager, inner Nørrebro/Rådhuspladsen	
3	Were you aware before you started the job that in the housing association's portfolio there was one of the recycled apartments? If so, can you deepen your knowledge?	No, only in 2011 /2012 when summarizing portfolio. A frame hangs in the office with an article about the recycled apartment.	
4	Were you aware before the inquiry regarding this project that there was one of the recycled apartments in the housing association's portfolio? If so, can you deepen your knowledge?		

Environment

5	What extent of renovations have been carried out at the recycled apartment and what has been the reason for the need?	<p>Stair tower damage, many years after construction, ca. 2010. I think that the reason for this is HOFOR steam chamber, large district heating pipes under the building. The building is secure. Sunk 1.5-2.0 cm, leveled.</p> <p>Glazed roof tiles (recycled) are heated in ceramic kilns to more easily remove mortar. Makes the glazing fragile and there has been an annual need to replace stones.</p> <p>Small cracks in exteriors, typical stair damage, running repairs. Not for the past 5 years though.</p> <p>Water damage in yard.</p>	Inner roof (masonite), cannot inspect roof from inside (need for drone)
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6	Have "new" recycled materials been used in connection with: renovation works?		
7	What extent of future renovations is planned at the recycled apartment and what is the reason for the need?	20-year long-term plan sent.	
8	What is your experience of the durability/condition of the recycled/recycled building materials in the housing association in general?	Fully on par with other materials and residents do not typically know which materials have been recycled.	Rent: 1.087 dkk/m2
9	Has your knowledge of the recycled building materials influenced the way the building is run?	Not fully aware of which materials have been recycled in connection with renovation. New roof tiles due to urgent need. It might be an idea to have a "recycling warehouse" for renovations.	FSB: Control traceability and where the materials are used. Small renovation warehouse, recommendation.
10	Has your knowledge of the recycled building materials influenced the way the building is maintained and renovated?	Not easy to get an overview of where recycled materials have been used (eg at one point there was uncertainty whether pipes were recycled/recyclable).	

11	Have the recycled building materials played a role in choosing products for ongoing cleaning and maintenance, e.g. paint?	No, silicate paint.	
12	Have the recycled building materials played a role in	Not possible => does not exist.	FSB:
13	Has a condition assessment previously been prepared similar to individual building elements or the building as a whole?	Yes, sent.	
14	Has an energy label/energy inspection etc. previously been prepared for individual building parts or the building as a whole?	Green accounts for the association sent.	
Economy			
15	Is the operating budget for the recycled apartment different from your other buildings because of the recycled building materials?	No, that doesn't make it more expensive than a similar building with new materials.	
16	Is there an overview of the average annual operating budget for the recycled apartment?	Yes, sent.	
17	Is there an overview of the costs associated with renovations carried out at the recycled apartment?	Roof: Since 2012 => 34,000 2 times (replacement and maintenance) => 13,400 roof tiles + under-roof => not changed stones in the past 10 years, weak stones have "gone earlier".	
18	Is there an overview of budgeting expenses for future renovations at the recycled apartment?	Yes, sent.	

19	Is there an overview of the building's heat consumption and the associated costs?	<p>2020:</p> <p>District heating: 139 MWh Living area: 1,383 m² => approx. 0,1 MWh/m²</p> <p>Second building from the same time (Griffenfeldsgade 17): District heating: 90 MWh Living area: 421 m² => approx. 0.166 MWh/m²</p>	
20	Has your experience with the recycled apartment made a difference in relation to focus on recycled building materials in your other investments?	FSB does not have other buildings with recycled materials, but the board works with green ideas – UN Sustainable Development Goals.	
21	Has your experience with the recycled apartment made a difference in terms of focus on recycled building materials in connection with the renovation of your other buildings?	<p>No =></p> <p>But since the recycled apartment is special and the roof needs to be changed in 2024, it could be a thought to use recycled bricks.</p>	<p>FSB:</p> <p>It is important to talk about early on to residents. Idea: A small renovation warehouse with recycled materials</p>
Social			
22	What does it mean to you to have the recycled apartment in your portfolio?	Positive, interesting, special spirit => Environmentally conscious customers who would like to live here.	
23	Has your knowledge of the recycled building materials had an impact on the well-being of your work in connection with the recycled apartment?		

24	Do you have any knowledge of whether living in the recycled apartment is something that makes a difference for the residents? For example, a well-being survey.	Special collection of residents. Perception that many original residents chose to move in because of the sustainable profile.	
25	Has your work with the recycled apartment had an impact on the role of recycling materials in your personal life?	Not afraid to recycle stone materials/bricks. Too bad about a huge waste of resources. Looked for used tiles, concrete (50x50)	