

Chapter 4

Getting there: the planning process

Planning an ecovillage is “*hard work, but very instructive.*” [Understenshöjden]. It is unpredictable, complex, time consuming, and “*it is worth it!*” [Understenshöjden]. It is unique from planning other housing developments in two key ways. First, because ecological principles must be incorporated into the design. Second, because the future residents are involved in a process which is traditionally conducted behind closed doors.

Like any good drama, the story of ‘how to create an ecovillage’ requires a cast of characters, a good plot, and a few morals. The actors are introduced, then the plot unfolds. In the subtext are words of wisdom to live by while creating your ecovillage:

LEARN

HAVE FUN

COMMUNICATE

EXERCISE PATIENCE (lots of patience)

“The ecovillages which have been successful are those where the residents have taken part in planning. They are motivated people who can solve many problems themselves. The effort to implement the project has led to community¹ and solidarity.” [Smeden]

In the discussion of the planning process the residents are placed center stage. Residents’ evaluations of their architect, developer, builder and the city, are presented in the drama, with recommendations on how to choose and interact with these professionals. The contributions of other actors - neighbors, politicians, and banks - complement the cast of characters.

The story of the planning process is filled with advice and cautions to guide the stars of the show, the residents, through the rocky road to the realization of their dreams. Key recommendations and words of encouragement from residents conclude the drama, incidentally, this chapter.

THE ACTORS

Finding the right combination of people to plan an ecovillage is similar to casting a play. Each participant must be qualified to perform his own role and relate well with the other actors. Dozens of people are involved. Who participates in the process is effected by who initiates the project, how much knowledge the different actors have, and a little serendipity. The different roles can be divided into two categories; leading actors and supporting actors. In some cases, actors are cast in more than one role.

The leading actors are the residents, architects, developer, project leader, builder and the city. The supporting roles are filled by a variety of people: the bank, neighbors, consultants, suppliers, academics, politicians, the

media, and other businesses and organizations.

The roles can be muddled. Architects can be future residents. Future residents can be their own developer and even do some of the building. People can wear more than one hat as long as their responsibilities and boundaries are clear, preferably in writing. Doing too little or too much can cause conflict.

Ideally, everyone involved should be well versed in ecological principles and ready to support the democratic process of resident participation. At the very least they must be bold enough to try something new. Most importantly, *“Everyone should be prepared to give a little extra. In the short term everyone donates time and money, but in the long term everyone will get a good return on his investment, economically and in knowledge.”* [Hågaby]

In the survey, I asked residents involved in planning to evaluate the performance of: the architect, developer, builder and city officials. Each of these actors is at a disadvantage because, even if they are familiar with ecological principles they may never have encountered resident-directed planning. In a typical multiple residence project the final user of the home is not usually known, let alone a participant in its design. It is new territory to most professionals in the building industry to work with resident-directed planning. In this study, the most successful projects were those in which professionals entered the planning phase with a willingness to learn and cooperate. Projects where professionals adopted a “superior” attitude resulted in greater frustration and disappointment for the residents. The most successful projects reflect the short and long term benefits of resident-directed planning. In these ecovillages the social network tends to be stronger and overall satisfaction is greater.

The survey

Residents involved in the planning process of their ecovillage were asked evaluate their experience of the planning process. Sixty percent (69 of 113) of the respondents to the survey, had participated in the planning process. Unless otherwise noted, all statistics and quotes are from participants in the planning process who responded to the survey. As might be expected, residents responding from the newer ecovillages made the greatest amount of written comments about the planning process.

Did you participate in the planning process?

Number of respondents

yes	69	8	10	5	1	7	12	21
no	46	6	14	6	6	5	1	8

Percentage of respondents

yes	61%	57	42	45	14	58	92	72
no	40%	43	58	55	86	42	8	28

The results from planning section of the surveys from Myrstacken, Bålarna, and Ruskola are not separately recorded, but are included in the totals.² The number of answers received were not sufficient to be able to record

separately and still retain anonymity.

The percentage of respondents who took part in the planning process is slightly inflated for Solbyn, Åkesta, Myrstacken and Smeden in comparison to the actual number of participants. Those who participated in planning may have been more inclined to respond to the survey than newer residents because they have a greater personal investment in their ecovillage. Percentages listed for questions in the planning section are based on the percentage of participants in planning, not on the total number of responses.

I did not ask, in the planning section, the extent of the person's participation in the process. A handful of people noted they joined the project rather late. Their comments are included because the democratic value of participation, even in the final stages, appears to be valuable. These people also tended to mark the "do not know" option when evaluating the process. "Do not know" answers are not recorded in this report.

Main Roles

Residents³

"Resident participation in planning is key." [Understenshöjden]

The future residents have the starring role in the planning of the ecovillage. They are the ultimate stewards of the project. They, and no one else, must adapt to the results of the planning and execution of the project. *"The ecovillage is an experiment for the municipality, but not for those who live there. It is their house and home for life."*⁴

Involving the residents in future planning can be difficult. However, resident involvement is the best way to achieve long term success. Where residents have had little impact in the developmental process it has been largely because the system was not designed to include resident participation. To truly involve the future residents will require a change in the procedures for planning and building communities. More importantly, it will require a change in attitude within the building industry. Residents can bring a fresh perspective to the planning process; ideas the builder, developer, or architect may have never thought of themselves. Residents are not caught in a mental box, thinking only in terms of what has been will be again. They are free to think creatively because they are not hampered by the "way things are," instead they can dream of the way things will be.

The quality and extent of the participation of future residents in the planning process shapes the outcome of the ecovillage. My research shows a correlation between the resident's satisfaction with the technical and social aspects of the ecovillage and the extent of their participation in the planning process. The projects with the least resident participation in planning tend to be those with lower resident satisfaction.

Current residents are strong supporters of participation in the planning process, deeming it valuable (92%) and motivational (86%).⁵ Even with its time commitment and frequent setbacks, residents advise future planners

to “*participate in the process,*” because “*participation has a very high value.*”[Solbyn].

[Table: II b - value of participating in planning process]

How did you experience participation in the planning process?

very valuable	51%	valuable	41%	valueless	3%
very motivational	46%	motivational	40%	demotivational	3%
very time consuming	41%	time consuming	40%	little time	10%

Planning members greatly disappointed with the process often voted with their feet. Many disappointed members left the group before the project was finished. This was particularly true in Solbyn, Åkesta and Myrstacken,⁶ where only a few households who took part in the planning process actually moved in: 11 (of 50), 5 (of 24), and 2 (of 37) households, respectively. A few Åkesta families moved in despite disappointments, but made their point clear by deeming the planning process as without value and demotivational, where “*nothing was as we had planned.*” The Myrstacken planning process was so frustrating to some members that the first resident planning group was dissolved (new members were recruited by HSB for second group). The story of Söderkulla is told in the second half of this chapter. Söderkulla is an ecovillage which may never be finished as a result of a series of disappointments. Future residents progressively lost control over their fate. Some of the most committed members finally declared defeat and left the project. Söderkulla’s story is a stark contrast to an ideal progression of events. Happily, the ecovillages described in this study are the success stories. Sadly, dozens of projects have never been completed due to insurmountable problems in the planning phase.

In this study, the residents found the planning process rewarding, but they wouldn’t necessarily do it quite the same way again. Even residents who would recommend that others follow in their footsteps (31%) added caveats, such as “*listen more to those who will live there.*” [Solbyn] Many people expressed to me their wish that the collective wisdom of ecovillage “veterans” could be carried on for the future benefit of others.

[Table: II g - recommend same process]

Would you recommend a similar process for others?

Yes	31%
Somewhat	47%
No	12%

The benefits of participation

Sitting through hours of meetings just to keep a chair warm, is not what compelled people to return to the drawing board month after month, and year after year. Residents gained a lot from participating in the planning process. There are long term social, emotional and technical benefits to resident participation.

Social

An old adage appropriately states that “adversity builds strength.” When it comes to realizing your dreams in cooperation with twenty others and their dreams, sparks are bound to fly, but the results make it worthwhile. You “*get to know [your] future neighbors quite well.*” You “... *clearly see what a complicated composition of individuals [you] are.*” [Mjölntorpet] You “*live through the good and bad together even before moving in*” [Mjölntorpet]. “*It takes a lot of time and energy but it “welds together” the members in a way that is beneficial once you move in.*” [Tuggelite] Planning together is a good way to get to know one another and strengthen community, wrote three residents of Understenshöjden.

Residents may not appreciate everything about their future neighbors, but they become a known quantity. Residents become accustomed to one another’s preferences and their approach to problem solving. They learn to trust one another. They learn compromise and to agree to disagree. A group that plans well together will be better at solving problems later in ecovillage life.

The four ecovillages with the least problematic planning periods, Tuggelite, Bålarna, Mjölntorpet, and Understenshöjden, were also evaluated by residents as having the best current social climate. Solbyn is an exception. Solbyn had more than their fair share of problems in planning, but residents have since worked very hard to foster community. The visionaries who remained in the Solbyn project and who still live there today, have helped to make Solbyn a healthy community. The second half of this chapter discusses the role of visionaries in more depth.

Fun should not be underrated. Having a good time together makes the hard times more bearable. Being able to laugh together makes disagreements easier to resolve. Hard work sprinkled with good fun is a good recipe. When “*the complicated (krångliga) building process [is] exhausting and cause[s] irritations,*” [Smeden] it helps to be able to trust one another; look to one another for support, and be able to smile in the face of disappointment.

Emotional

“It was very stimulating to be able to take part in the development of ones own home.”

[Mjölntorpet]

Home holds a unique meaning for each of us. Taking part in the design of your own home can illicit a pride far greater than merely purchasing a home. Creating an ecovillage is more than designing a group of homes. It is creating a quality of life for each individual, and his family. Time, knowledge and considerable money are invested in a dream. Seeing that dream come to life can be elating. Seeing it die can be crushing. The investment is great, “*all we talked about and thought about was the ecovillage, now that we are finally living here we have to relearn how to think about other things.*” [Understenshöjden (interview)] Nine residents of Understenshöjden wrote that having influence on ones own living situation is a great benefit of participating in the

planning process.

Warming a chair, however, is not what makes the experience valuable. The opportunity to be heard, to have influence, to learn, and to use new knowledge to create a vision is why residents have persevered. The extent of democratic process and knowledge of the residents distinguish the projects from one another. The more democratic the procedures and the more knowledgeable the residents, the more successful the planning process.

Democracy - History has proven the potency of democracy in national government, but what about on a smaller scale? I would argue that democracy is precisely the principle to be practiced when planning an ecovillage. People want to feel that their presence in the planning process matters; that they are not just warming a chair. Democracy does not mean that everyone gets what they want. The value comes from knowing that each had a chance to his your say and people listened. Just being able to voice an opinion, to say “I do not want a blue house” and to have that opinion witnessed and recorded validates that opinion, even if the physical result does not reflect that particular preference. The sheer act of hearing and acknowledging each members’ preference contributes to an atmosphere of respect and belonging.

Understenshöjden’s planning process was heralded for its emphasis on democracy.⁷ However, one resident was impatient with the time and patience democracy required. “*We had too much consultation and democracy, which led to a lot of friction. More top steered.* (More decisions should be made by the board and professionals) “ [Understenshöjden] Another resident, on the other hand felt cheated because she wanted “*more democracy in the planning stages. We were not consulted about important things which affect us personally.*” [Understenshöjden] Each group must work together to achieve an optimum balance.

The chief complaint of Åkesta and Myrstacken members was the feeling that their contribution didn’t matter. The technical results of the project, the actual houses, are good, but the social cohesion and moral of the resident planning group suffered. The professionals⁸ weren’t really interested in what the residents had to say. They stated that they did not have time for resident participation and they knew best, designing houses was their specialty. They were not open to the possibility that the residents could be skilled in designing a home and community to meet their own needs and desires. The attitude that the professionals know what is best for the residents produces an us vs. them and expert vs. novice dichotomy between the residents and the professionals. The residents’ comments sum up their frustration with not being heard.

- “*The planning group had too little responsibility.*” [Åkesta]
- “*We were run over towards the end by the building company. They were focused on the prestige of it all.*” [Åkesta]
- “*We were a rather large group who were interested in the beginning but unfortunately most jumped off. Only 2 of us moved in.*” [Myrstacken]
- “*I would recommend a similar process, but with significantly more participation of those who are*

going to live there and better ecological knowledge of those building.” [Myrstacken]

- *“If I could do it over I would like to have a greater voice in the process.” [Myrstacken]*
- *“The representatives for the future residents should be very capable and knowledgeable. They [the professionals] should have listened to us more as clients.” [Solbyn]*

The fallout from the failure to communicate during the planning period has carried over to the current attitude in these ecovillages. Residents here (and in Solbyn where the same type of miscommunication occurred) are far quicker to complain about the appearance and technical failures of the ecovillage. Part of the reason could be because many of those living there today did not partake in the planning at all. However, in other projects this explanation does hold true for those who moved in after the project was built. The long term morale of these ecovillages seems to have been tainted by the residents negative experience of the planning project, especially regarding technical and design features. In those ecovillages where residents had the most influence over what technical solutions were chosen the complaints are fewer even though the actual number of technical problems does not vary by much.

Communication and patience is important between residents as well as between the professionals and the residents. People want to know their opinion counted. It boosts self-confidence, and confidence in the group as a whole if all contributions are considered important.

[Table: II c - opinion counted]

Do you feel your perspective was taken into consideration?

Yes	49%
Somewhat	40%
No	7%

* In Åkesta no one wrote “yes” and 60% wrote “no.” Fredrika Mårtensson’s study indicates that few Myrstacken planning members felt their opinion was taken into consideration. In Solbyn members were listened to within the group and with the architect, but not by the developer, city or builder.

It is ideal to be able to participate from the beginning of the process. Joining late limits influence and therefore limits a feeling of solidarity with the final project. One resident, coming in on the tail end of the planning, found the experience demotivational because most decisions were already made. Another resident, who joined one year before the project was finished wrote, *“I came in late and couldn’t influence much but it was important to have been part of the process.”* [Solbyn]. I agree with the several residents who wrote that it is, *“Valuable to take part from the beginning.”* [Mjölntorpet] It is not always possible to actively participate over the entire course of planning. The Process section includes recommendations for how residents can stay informed even while they are unable to be active in the process.

Members must be assertive and knowledgeable - Feelings are important to the group. More important than feelings, however, are well-informed observations and suggestions. These are even more valuable when the participants are knowledgeable. Planning an ecovillage *“requires a very strong commitment and knowledge by the residents; also patience, humility, and good familiarity with the political decision making process.”* [Bålarna].

The more informed residents are, the better their chances of positive results, ecologically, socially, and technically. No example is more clear than the comparison of Solbyn and Tuggelite. In Tuggelite, *“A few [members] had a lot of knowledge which we others had a lot of use of.”* [Tuggelite] These residents were able to approach their project on a professional level. The Solbyn group had many idealists but little knowledge. They were not taken seriously and ran into numerous bureaucratic problems as a result of not being familiar with either ecological building principles or the building industry. The Solbyn members certainly learned a lot in the ten years it took to get the project built, but they would have benefited from more knowledge earlier. Because of the unique nature of an ecovillage and its dependence on resident satisfaction to function well in the long term, the collective years of experience of architects, developers and builders is not enough. The ecovillage projects can not be cookie-cutter images. They must be tailored to the residents and the site.

Knowledge helps empower residents with confidence. *“We learned a tremendous amount during the planning time. Especially myself who was interested but not so knowledgeable.”* [Understenshöjden] An informed participant can gain more from the democratic process because his or her contribution is based on fact, not just opinion. Knowledge helps residents gain the respect of the professionals with whom they are dealing. The residents, because they are embarking on a non-traditional project, bear the burden of educating the professionals. A person is more likely to be heard if he or she can speak confidently and authoritatively. Residents should approach experts as though they, themselves, are the experts. They should not act as though they are begging for the good graces of a professional. The residents are the final client. They will pay for the project and live in their homes for many years. As the creators of their future, they are experts.

Knowledge is so important that one resident went so far as to write, *“If, in the group, there are people skilled and knowledgeable in building they can plan, otherwise let the developer hire people known for their skills - without the residents’ participation.”* [Åkesta] Due to previously discussed reasons, my opinion is not as strong as this resident’s, but his point is clear. Knowledge is crucial.

Residents strongly encourage being informed.

“Make sure each member has a broad knowledge.” [Understenshöjden].

“Obtain as much knowledge as possible; go on field trips, invite people who can relate their own experiences. Divide into groups and learn more about different areas. Let it take time.” [Smeden]

“Keep informed, even on the reserve list.” [Understenshöjden]

“Gain more knowledge, maybe even university courses.” [Solbyn]

Nothing is more telling about the importance of knowledge to the process than the following table.

As one resident so aptly put it, “*You never stop learning.*”⁹ [Understenshöjden]

[Table: II h - sufficient information]

Did you garner sufficient information from your studies?

Yes 31%

No 69%

[Table: II i - how did you learn]

How did you obtain information about environmental and ecological building issues?

Study circles 38%

On my own 56%

Other 32%

Not only did residents not feel they knew enough to plan the ecovillage, they also felt, by and large, that they were on their own when it came to learning what they needed to know. The second half of this chapter discusses methods which can support the group’s learning process.

Technical

Knowledgeable residents can evaluate the technical considerations in planning an ecovillage. The more technical knowledge residents accumulate the better able they will be to influence the physical outcome. The Understenshöjden group had three residents with architectural training. Residents spent many hours in study circles, going on field trips, and attending lectures. Their efforts were rewarded. The group was able to obtain positive technical results and beautiful homes. The developers involved in the project might be credited with the success of the project if it were not for Söderkulla. Söderkulla, an unsuccessful ecovillage project, has had the same developers as Understenshöjden, but the future residents for Söderkulla have lost much of their control over the results of the project. The combination of knowledgeable residents, persistent visionaries, and a commitment to democracy have proven successful in Understenshöjden.

Architects

Choosing an architect is never an easy task. The task is all the more difficult when the project strays from

the usual. The architect should have knowledge and experience with ecological building. In addition, she or he should: be a good communicator; be prepared to work in consort with the future residents; be able to exchange ideas with members unfamiliar with building terminology; as well as, effectively cooperate with the builder and developer.

The role of the architect in the various projects varies tremendously. His most basic role is to design the homes, but even that role is not necessarily clear. The residents in Bålarna drew up their own drawings ahead of time. The architect was more a consultant than a designer. In Smeden the architects wore many hats; interpreting the residents list of specifications, subcontracting consultants, serving as project leader, and developer. The architect of Mjölntorpet was also a future resident. In cooperation with the other residents he managed the role of designer, developer, and project leader. Whatever the duties of the architect, they should be extremely clear and written into a contract. Additionally, his or her responsibilities should be formally reviewed throughout the process to address any confusion or conflict that arises during the process. The architect is interpreting the desires of the client. The residents are the final client, not the developer, or builder. The architect may be paid directly by a developer or a bank, but the residents still remain the final client. The residents may not feel comfortable critiquing the architect because he is the professional, however, in the long run, the best results will come from clear communication between the parties.

The architect in Mjölntorpet had the very best interests of the residents at heart, but because he had such a broad role (as future resident, architect, project leader, and chairman of the planning group) it was inevitable that his work would be a reflection of what he felt was best. Based on my observations of Mjölntorpet's planning process, and comparing it with other projects, I would recommend that residents try to spread the responsibilities between more people. This allows individuals to take a break from the process to get some perspective, as well as increasing the variety of contributions to the project.

The architect, or developer, can choose to contract the assistance of a landscape architect or the residents can hire a landscape architect separately. I strongly urge all projects to enlist the services of a landscape architect. When the outdoor climate of the project is overlooked the experience of the entire site is damaged. Landscaping issues are discussed further in the Process section of this chapter and in the Design chapter.

Survey

Residents were requested to evaluate the performance of the professionals in their project. Included were: the developer, builder, and city officials. The architects received the most positive evaluation.

Administrative and economic: The majority of responses to the questions about administrative and economic support were primarily “don't know.” I did not specify what I meant by these questions, hence some confusion. Much administrative work by the architect is considered standard, for instance: creating the necessary series of drawings, negotiating with a developer and builder, and calculating costs. Economically, the architects, in many cases, were paid in “experience” rather than monetarily. *“The architect's motivation¹⁰ is important*

for its realization,” wrote a Solbyn resident. The architect’s commitment is probably more important in a resident planning project than in most any other type of project. Residents do not want to invest in the project on speculation. They typically do not typically have the financial resources to do so. In Smeden the architects agreed to receive payment after the project was complete. This was a great relief for the Smeden planning group which was having difficulty getting members to make a financial commitment to the project early in the planning phase. Three of seven Smeden residents said the architect’s economic support was good. I had expected a more positive evaluation. I am not certain that residents in the various projects were aware of the tremendous commitment the architects were making. I would say many of the developers and builders were working for economic gain. I do not think any of the architects were involved in these projects for monetary gain. They put in many more hours of work than they were paid for. As I understand it, the architects involved were making a long term investment, taking a short term pay cut, in hopes that their experience with ecological building would pay off in the long run. Two residents in Understenshöjden got it just right when they wrote; *“Far too many hours of unpaid work by several architects in the group has been a condition for everything to work.”* *“[He] invested a lot of his time and time equals money.”* [Understenshöjden]

[Table: II) d. architects role]

How did you experience the participation of the architect?

Architect ALL %

	very good	good	mediocre	poor	very poor	don't know
administrative.	6	26	18	3		32
economic 3	12	18	6	3	41	
cooperation	34	44	6		2	7
ecology	20	37	13	6	6	13

Cooperation: Residents evaluated more favorably, cooperation with their architect than the cooperation with any other professional. Tuggelite, Solbyn, and Smeden evaluated their architect entirely as “good” or “very good”. The other projects cited primarily “good “ and “very good”, except Åkesta. Åkesta did not have an architect who stayed for the duration of the project. The original architect, who was very excited about the project, was dismissed. Instead, the developer, in the interest of time, used standard drawings. Cooperation with the residents is exceptionally important to ensure the residents’ wishes are incorporated into the project.

Ecology: The architect’s competence in ecological design was reviewed positively by the ecovillages, 57% “good” or “very good.” Despite the positive evaluation, many residents wrote recommendations that an architect with special competence in ecological building be chosen. The architects in Smeden did not have a special competence in ecological building but between the residents commitment to learning as much as they could and the architects commitment to build according to the resident’s preferences, the results were quite good. The architect for Understenshöjden was seen as having good ecological knowledge by the majority (62% -

“good” or “very good”); a few residents were critical. The trouble there was not in the broad concepts, but the details. *“Bengt Bilén had little experience with small houses but gained good knowledge of small house ecological design through hard work.”* [Understenshöjden]

A Solbyn resident had an astute observation about their architect’s ecological knowledge. *“The architect had the knowledge but not the power.”* [Solbyn] All too often, this is the case in building projects. In Solbyn, the architect’s original design was subjugated to the preferences of the developer and builder. Solbyn’s experience presents an case where residents may have been better off had they been able to fulfill the role of developer themselves.

Developer

Similar to choosing an architect, residents should try to, *“Choose a contractor and developer who are familiar with working with resident participation.”* [Understenshöjden] Judging by the survey responses, a developer should be chosen who has at least an openness to ecological principles. Ideally, the developer should possess experience with ecological housing and self-contained systems (on-site waste water treatment, on-site heat source, etc.) Choosing a developer with a familiarity with ecological principals is important because the developer oversees the contracting of a builder and may assign an architect. The builder must be able to properly construct the homes according to ecological principals. The developer can also be instrumental in persuading the city planning commission to accept non-traditional designs. If the principles behind the ecovillage are unclear, or unacceptable to the developer, chances are, the developer will continue with other methods with which they are more familiar. In my opinion, residents should be extremely cautious when considering the services of a developer. The potential for residents to lose their influence over the process is great when a developer is involved.

A building project does not require that a separate developer is contracted, however, a developer can ease many potential headaches. The developer can manage all or just a few details. The developer can hire the architect, the project leader and all consultants, secure funding, negotiate with the builder, and even provide maintenance and administrative services after the project is built. If the services of a developer are not enlisted, these tasks must be completed in another way. In Tuggelite, Mjölntorpet, and Ruskola, the residents completed these tasks. In Smeden and Mjölntorpet the architects fulfilled this role. The other five ecovillages employed a developer.

A developer brings to a project financial resources and experience in the building industry. A developer has more financial clout and collateral than a group of individuals would have. A developer has contacts and respect in the building industry which can help expedite a project. Those ecovillages with developers may not have been built without the support of a developer. The non-traditional idea of an ecovillage has been difficult for city officials, banks, and builders to embrace. Although the ecological knowledge of the developer may have been poor, a Solbyn resident wrote, *“HSB’s knowledge and ecological interest was poor, however, we needed their administrative and economic support.”* [Solbyn] A developer has the resources to take control of a

project and make certain it works, something a Mjölntorpet resident would have welcomed. *“Make the developer responsible for everything. Don’t let anyone in the BRF(home owner’s association) have a connection to the developer. Hire a lawyer.”* [Mjölntorpet] This control, however, is precisely what an Understenshöjden resident didn’t like. *“Reckon that the building branch is a branch of the wild-west where the ecovillage association must be its own sheriff.”* [Understenshöjden]

Despite the potential assistance a developer can provide I would encourage residents to avoid the employment of a developer. The experience and financial resources of a developer is easily transformed into power over the residents wishes. In my opinion, Understenshöjden and Bålarna are the only resident-directed projects with a developer where the residents were able to retain their “voice” in the process. HSB, the developer of Understenshöjden, also developed Solbyn and Myrstacken, and will complete Söderkulla soon. There is little evidence to show that, as a company, they have understood the importance of resident-participation throughout the process. If a group is unable to find another means of accomplishing their goals they should be certain to establish, in writing, the parameters of their relationship with the developer.

Survey

The evaluations of the developer are limited to the ecovillages that employed a developer. The assessment of the developer is “good” to “mediocre.” Administrative and economic support is especially important from a developer. The developer knows the procedures for building and for securing financing. His support can be crucial. Few developers can say they specialize in ecological building, but some companies are beginning to make an effort to improve their ecological image. Residents should be certain their interest in the environment is more than just superficial.

[Table: II e - developer]

Developer	All	%	very good	good	mediocre	poor	very poor	don’t know
administrative	8	24	22	11	8	19		
economic	5	27	22	11	5	22		
cooperation	5	32	30	8	8	14		
ecology	3	0	27	49	11	8		

I would not recommend that a developer take the initiative to build an ecovillage unless he is genuinely committed to incorporating the residents’ interests, and I don’t just mean letting the residents choose the color of their bathroom. Åkesta, as already discussed, had many problems with their developer. Residents felt *“bowled over.”* Myrstacken residents were also run over by the developer. I think both developers began with good intentions, but reverted to the procedures with which they were familiar when residents vacillated and took “too much” time to consider their options.¹¹ Sometimes making money is not the most important role of a business. A developer will want to realize a financial gain from an ecovillage that should not be the primary goal of participation.

In Åkesta the developer made money and the resident paid the price. Residents experienced inflated costs due to the rush to finish the homes for a “building fair.” A resident wanted, “*Better support from the developer further along in the process. Even after moving in.*” [Åkesta] The costs to the residents was so high the ecovillage association considered declaring bankruptcy. It would have been a good faith gesture by the developer to offer financial assistance, especially because the developer influenced the increased costs. The developer did not offer any further assistance.

A member involved in the Myrstacken project, who did not move in, spoke of the frustrations of working with a developer, and other actors, who were not particularly interested in the resident perspective. “*We wanted to think in new creative ways. It stopped there. Everything must still go as it had always gone before.*” [Mårtensson, F. 69]

Bålarna is exceptional because the president, Leif Stegenius, of the local company, Nordanstigs Bostader, took a personal interest in the project. The Bålarna residents had already done most of the designs for the project. The developer’s primary role was assisting with financing and securing a bid for a builder. The developer understood the unique nature of an ecovillage. “*You can’t just sit down and plan an ecovillage yourself. There must be a group of people who are interested when you begin, which is the opposite of what we normally do.*”¹² The developer arranged to purchase the houses and lease them to the residents. This arrangement meant that the developer had an especially great interest in the long term success of the ecovillage.

Bålarna’s success partially hinged on the commitment one individual in the small development company, Nordanstigs Bostader. Fortunately, Stegenius was able to see the project through to its completion. A large developer like HSB has many employees. A resident initiated project can take three to ten years to complete. A lot of people can come and go in a company in that amount of time. The resident group must have a philosophical commitment from the whole company, not merely the support of one or two people on the staff. If the contact person leaves the resident group must be able to trust that the developer and its company will retain the same quality of commitment as was initially agreed.

The architects in Smeden did not have much experience in the role of developer for large projects. This led the seven residents surveyed who were involved in planning to comment that “*the architects, as developers, were poor to start but got much better towards the end.*” One problem was that they, “*Had too little knowledge about the contractors freedom to make changes. Despite this it was positive they remained for the building process.*” [Smeden] An architect can be effective as a developer. The group, regardless of the experience of the professionals with whom they chose to work, should obtain as much knowledge as possible about the mechanics of development. They should be able to knowledgeably monitor the project at all stages.

Project Leader

The project leader is the thread that binds the project together. A good project leader must be a good manager. She or he oversees all the actors and their actions and ensures their tasks are carried out as effectively

and efficiently as possible. The role of project leader can be fulfilled by one person or divided among several people. Ideally, the project leader should take part in the entire process from shortly after initiation to the follow through after building. It is important to have at least one person who is aware of all the details and participants in the project. The project leader helps maintain continuity between the different phases of planning. The project leader serves as spokesperson for the group with professionals, and between the professionals. A project leader may be chosen and hired by a developer. Or, a project leader or leaders may come from within the planning group. Ideally, this person should be someone familiar the process of planning and building. If the project leader is chosen from within the group, it is extremely important that members of the planning group to support the project leader as much as possible. Funds may not be available to monetarily compensate the project leader. He or she may volunteer the time. The project leader for Tuggelite “*put in about 4000 hours work to create Tuggelite.*” [Tuggelite] Tuggelite may have never been realized without the donation of his time and skills. The project leader may, for some reason, need to leave the project before its completion. Residents should prepare for this “worst case” scenario. The project leader should keep the group informed and always document her actions. At least one other person should personally know the contact persons the with whom the project leader is working.

Builder

“It is no easy task to break apart a pattern. The building process has its well entrenched formulas. We pushed the limits the whole time while, at the same time, we wanted to find new methods ourselves.” [Mia Torpe, Understenshøjden]¹³

“Be very careful choosing a builder,” wrote five residents of Mjölntorpet whose builder declared bankruptcy. The builder has a tremendous impact on the outcome of the project. The builder gives physical form to the plans, making dreams a tangible reality. The choice of a builder should not be made lightly. The lowest bid is not necessarily the best bid. The quality of the work will remain for decades to come. Large disappointments and high costs have resulted from poor matches between builders and clients. It is crucial to establish “...*strict expectations and requirements in building, it is hard to change later.*” [Bålarna]

Naturally, a builder will want to use the methods and materials with which his company is familiar. Only a few builders have experience with ecological building techniques, although the number is growing. The builder must understand that this is not “just another project.” New or unusual materials and techniques must be employed. The builder should not be one who might receive the following type of critique: *“They saw it as just another project. They were not interested in the ecological aspect. Many problems with, for example the compost toilet, are a result of their incompetence.”* [Solbyn].

Successful building is of utmost importance to the project for three reasons. First, because the project has a positive image it wants to portray to the public. Media coverage of the ecovillages has been quick to point out technical deficiencies. A “normal” housing project does not usually receive media attention unless it is exceptionally

good or bad. Second, errors can undermine the environmental goals of the project. The techniques must be executed carefully to avoid a complete failure of the technique. For example: poorly constructed district heating culverts in Mjölntorpet have nearly nullified the potential energy savings from having district heating (vs. individual systems). In Smeden, the Aquatron toilet system failed to function properly because a part had to be installed at a slight angle. Instead, it was installed parallel to the ground. It took many months, at no small cost, to fix the mistake. In the meantime, residents' confidence in the "alternative" system was eroded. The best designs in the world are pointless if those constructing them have neither the skill to execute them nor understand the importance of executing them correctly. Third, errors can undermine the moral of residents about the project. Problems with the execution of their plan will serve as long term reminders of in which ways the group failed to implement the plans they had developed together. Resentment and disappointment may linger for years.

The builder must have a representative who is a good communicator, willing to listen and respond to the special needs of the project. The Understenshöjden resident group wanted to hold workshops for the construction employees to teach ecological building techniques. Their request was refused. As a result, construction workers were angered. Their routines were changed and the work was time-consuming.¹⁴ Had the builder been willing to hold the workshops, the builders employees could have benefited from new skills and knowledge. Ecological building is a growing trend in Sweden. It behooves a builder and its employees to stay competitive by gaining as many skills as possible.

The builder can have a great deal, or very little, freedom to make changes in the final plans, depending upon which type of contract is chosen. Four types of contracts are: a total contract, a steered total contract, general contract and a shared general contract.

Total contract: the builder has the greatest control over the final product with a total contract. The client provides the drawings and specifications of functions for the buildings. The builder may make changes in the design to accommodate technical or monetary considerations. The builder has freedom to choose which subcontractors to hire (i.e. plumber, electrician, roofer) and which products to purchase to fulfill the specified functions. It is the builder's responsibility to determine the best materials and technical systems within a determined budget. A builder with a total contract might, for example, subcontract a heating contractor. The size of the house and the number of inhabitants, and preferred system are specified, and the heating contractor chooses within the predetermined budget the system which best suits the function. Leaving these tasks to the builder can be advantageous because the builder, over time, has established contacts and gained experience. This allows the builder to find the tradesmen and materials best for the job, usually for a lower price than other types of contracts. Three of the nine ecovillages profiled had a total contract. Because this type of contract offers builders the greatest freedom to make decisions on their own, it is especially important that both the client and builders make their goals and concerns crystal clear in a written contract. The monetary cost for a total contract tends to be lower than any other type of contract, however, residents sacrifice some control over the final results in choosing a total contract. The planning group should assess how many compromises they are willing to make in order to

keep costs down.

Steered total contract: this type of contract is very similar to the total contract except that greater details are furnished by the clients. The resident group might specify a particular window or toilet, a particular subcontractor, or a preferred building or installation technique. Four of the nine profiled projects used a steered total contract.

General contract: in this situation the client is responsible for planning all of the details of the project; the materials, method of building, and type of technical systems. The client then hires a builder to execute the plans. The builder has the freedom to subcontract responsibilities. The client, not the builder, is responsible for enlisting necessary consultants for the project. One of the nine projects had a general contract.

Shared general contract: the client must have a good familiarity with building to execute this type of contract. The client, and enlisted consultants, are responsible for all of the plans and overseeing the contractors. The client signs contracts with multiple parties and coordinates all work. Or, one of the builders can be designated as the “lead” builder and oversee the different parties. None of the nine projects had a shared general contract.

How did you experience the participation of the builder?

Construction	All %					
	very good	good	mediocre	poor	very poor	don't know
administrative	2	6	22	16	13	35
economic	3	24	16	16	29	
cooperation	2	16	18	26	15	18
ecology	2	15	26	35	16	

The survey evaluations of the builders is much less favorable than for any other professional members of the planning process. Explanations of this are varied.

First, by the time the buildings were ready to be built, residents had been working for a long time. Their expectations were high, their emotional investment great. Those who were able to influence the planning were eager to see the results of their work. Those less able to influence may have seen this as a final chance to have their wishes fulfilled. However, because the builders often “*Didn't take part in the planning [they], just fulfilled their contract.*” [Tuggelite], people from both types of groups were disappointed.

Second, the quality of the work was strongly impacted by the frequent complaint that most builders “*Had no ecological knowledge.*” [Tuggelite]. Sixty-three percent of those surveyed thought the ecological performance of their builder was poor or very poor.

Third, financial considerations tended to dominate the choice of the type of contract. The knowledge, confidence and experience of the residents, also influenced their choice of a type of contract.¹⁵ As a result of

these factors, and others, the general tendency was to choose a “total” or “steered total” contract where the building company has a great deal of freedom to choose its own solutions. This freedom meant that builders did not necessarily fulfill the residents expectations. The builders were called “incompetent” and “cheats.” The builders were accused of a “...a lack of knowledge and an obsession with keeping down the price [which] led to bad work.” [Understenshöjden] A Smeden resident who realized the loss of control with a “steered total” contract recommended to “*Be more careful in the contract/ordering, with better control and follow-up of the building. A general contract instead of a steered total contract should be chosen.*” [Smeden] Arguments can be made for and against each type of contract. To satisfy the interests of the residents and the builder, the “*builder’s interest¹⁶ and competence is important.*” [Solbyn]. The builder should be brought into the planning process as soon as possible so the company can understand the particular desires of the group and the group can meet with and gain trust in the builders. Additionally, “*ask as many ecological builders as possible about their experience and mistakes.*” [Understenshöjden] A trusting relationship with the builder should be sought to avoid the expensive option this resident recommended. “*Do not depend on foremen and contractors. Hire your own experts, involve as many knowledgeable people as possible.*” [Understenshöjden]

The City

The city, or municipality, must approve the location and general design of an ecovillage. All construction projects require city/municipal approval. A positive relationship with the city can be a great help. The city is in a position to facilitate: land purchase, administrative paperwork and approval, zoning approval, and assistance in securing grants or other funding. Residents will want to familiarize themselves with the city zoning laws as early as possible. City regulations may prohibit: wood burning stoves, on-site waste treatment, or specify particular building designs and lot sizes. An ecovillage may need to acquire special permission on many details before gaining permission from the zoning board to build. The city council may also need to approve the zoning exceptions. Support of the city spares the planning group the task of convincing officials of the merit of their project.

Zoning¹⁷ is the set of rules governing the type and place of development in a municipality. Areas may be zoned as commercial, residential, industrial, or mixed. Zoning laws can specify how much can be built in an area, where it can be built, safety standards for the buildings, and much more. Depending on the perspective, zoning can work for or against a project. All projects must receive approval from the zoning or planning board.

Several municipalities have been indifferent to the ecological housing projects, neither supporting nor opposing the idea. In the case of Solbyn, however, the zoning board was very reluctant to consider the group’s proposal. The city insisted the group enlist the support of an established developer before further consideration. In Myrstacken, Ruskola, and Smeden, city politicians were the initiators of the projects. The city facilitated: securing financing and completing and gaining approval for required paperwork. Most city governments, nor any other entity, are not used to involving residents in the planning process.

Mjölntorpet may have had the best experience regarding the city. The city was supportive and did not try to steer the group. In Myrstacken, the city was not familiar with the idea of working with the residents. The city planning architect observed, “*we have never worked with that (resident participation) as a goal and I have seen this resident group as one of several interests...We think that this group of people are rather privileged to have been allowed to take part in the planning as much as they have.*” [Mårtensson 98,100]

In Ruskola, the municipality was actively involved in the creation of the ecovillage. The municipal council drew up the parameters of the design. After attending general information meetings, interested citizens were required to complete 60 hours of training in ecological building and principles (at a nearby university), before they could build their home. A city could additionally provide training in mediation and communication. The involvement of a city could be very positive as long as the residents’ and their goals remain the key focus of the decision making process.

How did you experience the city’s participation?

Community	All %					
	very good	good	mediocre	poor	very poor	don’t know
administrative	3	16	22	15	10	32
economic	0	21	23	16	15	24
cooperation	6	21	18	12	16	24
ecology	0	6	21	18	15	28

The participation of the cities received a range of evaluations. It is not as simple to “shop” for a city as for an architect or builder. The group can not choose which city officials they would prefer to work with. A particular person employed by the city may be opposed to the project or difficult to deal with. It is of utmost importance to the resident group to develop professional and diplomatic communications with this person, regardless of any difficulties. A congenial and knowledgeable spokesperson from the resident group will need to get to know the appropriate people in the city government, learn the local regulations, and the find out the city’s long term planning intentions. An alternative project, such as an ecovillage, is best navigated through the system rather than forced upon unsuspecting, or un-welcoming officials.

Many cities have become more interested in ecological projects within the last decade. When the Hågaby group first approached Uppsala officials with their idea, the city proposed a piece of land 15 km from the center of town. Eight years later the same city officials were asking the group why they wanted to build so far out when there were great options closer to town. In the Solbyn project, the city officials insisted the project have double systems. The city officials were skeptical. They doubted that the systems would work. They also doubted that anyone would be willing to move into a home without a standard flush toilet. When Tuggelite was built in 1984, Karlstad, the city in which it was built, was far from accommodating. Some city officials were actively opposed to its ecological technologies (compost toilets, wood heat). Ten years later, Karlstad “*reduced the land price by 60%*” for the Mjölntorpet project. It is no surprise that many of the “poor “and “very poor” evaluations of the

city came from Tuggelite and Solbyn. However, it is also clear that city officials can become more open to the concept of resident-directed ecological housing projects - even to the point of encouraging it. City officials can be just as susceptible to the urge to “stick with what they know” as an architect, builder, developer, or anyone else for that matter. However, city officials are equally likely to be receptive to new ideas if they are presented in a non-threatening and compelling manner. Resident planning groups should not be discouraged by initial resistance to their project.

The Jönköping community initiated the Smeden project and offered the group 18 sites to choose from. Additionally, the city deferred payment for the property and fees for the approval of the site plan until the building began, sparing the residents financial worry. This gesture also helped keep people in the resident group. A lot of resident groups disintegrate once money is required to be invested in the initial phase. People are hesitant to invest in a project they aren't sure will happen. Payment at building start is much easier to accept. The project is tangible then and people can be more confident they will get the home they had worked so hard on. Additionally, payment at the start of building could then be made from a loan instead of residents paying out of their pocket or hassling with trying to convince a bank they deserved a loan so early in the planning process.

Don't Know

The survey questions regarding professional performance were answered by many as “do not know.” I see two reasons for this. First, the respondent did not understand the question, which based on their commentary seemed the case for some. Second, several residents wrote that they did not feel they were sufficiently familiar with the information to answer. For some, this is because they came late to the planning process. Others didn't feel qualified to answer knowledgeably even though they took part in the entire process. This implies that the residents either weren't informed, or avoided being informed. It is not possible to force feed a person information, however, every person in the process should have the opportunity to gain an understanding of what the process entails. During the process, all members should have access to consistent updates. How this can be achieved is described further in the discussion of the process.

Supporting Roles

The supporting actors enable the actors in the lead roles. The supporting actors: the bank, the neighbors, consultants, politicians, organizations, and many others, have specialized contributions to make to the project. The participation of a bank is required. The assistance of the other supporting actors is not necessarily required but their participation has the potential to help the project considerably. Assistance is usually recruited, but sometimes can come unexpectedly. An influential politician might read an article about a project and know just the person with whom to speak, enabling the project to move forward quickly. In whatever form, the contributions of supporting actors should not be underestimated. Their actions could be a decisive factor in the success of the

ecovillage.

Bank

The bank plays a quiet, but essential, role. As the primary lender in most cases, the bank wields considerable power. Sparbanken in Karlstad saved the Mjölntorpet project from disaster. Its builder declared bankruptcy and the bank helped to arrange the funding to acquire a new builder. The bank can influence the outcome of a project by placing conditions on the loan. Developer HSB became involved in the Solbyn project because the bank would not loan money to the group but they would loan it to HSB. Bålarna faced a similar situation, where funding came indirectly through the developer, Nordanstigs Bostäder, who was able to secure a loan whereas the group could not. Different banks have different policies, region by region and company by company. Acquiring funding is based upon the bank's belief that the borrower can pay off the loan. This belief is based mostly on finances, but partially on trust. Establishing trust with bank officials, through confident and professional relations, can facilitate the lending process.

Neighbors

Positive interaction with the neighbors from the very beginning can help spread accurate and positive information about the project. To avoid any misunderstanding the planning group should communicate their intentions to their future neighbors. Families neighboring the future site of Smeden were initially against the project. They were afraid of worms from the compost heaps creeping into their yards. The members of the Smeden ecovillage association invited their future neighbors to meet the members and were able to dispel, among other fears, the impossibility of an invasion of earthworms. In Tuggelite, neighbors delayed building of the houses by filing a complaint with the city. Some neighbors heard about the composting toilets and the wood pellet furnace. They jumped to the conclusion that these systems would be unsanitary and polluting. Solbyn regularly invites neighbors from near and far to participate in Solby Day; a festival with music, food, tours, and a craft sale. Solby Day is a way for the residents to spread positive feelings in a fun way about ecological living. Hågaby has had superb fortune with their neighbors. Their neighbor, Uppsala Hem, was preparing to make improvements to the area. Hågaby and Uppsala Hem agreed to collaborate and Hågaby was able to install a superior solar heating system which will serve residents in both areas.

Consultants: Businesses, Suppliers, Academics, Veterans

Ecological design and building has matured a great deal over the last twenty years. Today, advice can be sought from experts on: ecological paints, windows, insulation, toilets, and dozens of other areas. The opinion of a consultant with years of practical experience with a product, is invaluable. Advice can be sought from: researchers, professors, architects, landscape architects, engineers, veteran ecovillage residents, suppliers of ecological building materials, and experts in: heating, ventilation, and waste-water treatment.

Businesses or academic institutions may be able to offer financial support in the form of grants or a donation of time, labor, or materials. Several ecovillage projects have received advice and financial support for aspects of their project. For example, Tuggelite and Solbyn received funding in exchange for assisting research organizations to monitor the performance of passive solar heating techniques. Study groups have invited a variety of businessmen and consultants to present their product or discuss their field of expertise. A paint supplier brought samples of beeswax based paint to a meeting in Smeden. The members were able to try mixing the paints themselves and experience their lovely smell. The choice of paint is just one of the hundreds of decisions to be made. These decisions are complicated by ecological and economical considerations. The vast array of options can be overwhelming. The contribution of a few experienced consultants can save many headaches.

Politicians and organizations are often in a position where their endorsement of an idea or project can help to speed along a decision caught up in the bureaucratic network. In Solbyn, politicians on the planning commission urged the commission to take another look at the proposal; a much needed boost. The original proposal for Smeden came from the Center political party and was later passed by the city council. Politicians were able to ease these projects forward. Organizations can also be a source of support and advice. Organizations with a focus on the environment or building, and local civic groups, can help a resident group make important contacts with the media, businesses, or academicians. Members in the organizations may already have contacts with professionals in the field.

THE PROCESS

The better the preparation, the better the home. A house can be built in a matter of months. The preparation can take years. The story of each ecovillage is different, but many of the steps along the way are similar. Great resistance to resident participation in planning still exists. It is seen by many entities in the building industry as a foreign, and therefore threatening, prospect. To be successful residents will need to be very strong and very knowledgeable. They must communicate their goals again and again with confidence and be patient with the slow pace of the process. Ecovillage planning groups may be able to precipitate a change in the overall attitude of the building industry, but only if the groups can prove their contributions are valuable and worthy of respect. A disorganized and unprofessional planning group may actually be detrimental to the goal of creating community through citizen participation. In the planning process sociology is as important as clear goals. Good persuasive and active listening communication skills are invaluable for residents in their interaction with other actors. Group dynamics are discussed further in the Social Organization section of the Social chapter.

The process described here is a compilation of several approaches with an emphasis on resident participation. The planning process is described in an instructional manner which may serve as a guide for future planning groups. Recommendations are based upon the experience of the ecovillages in this study. An ecovillage project

incorporating renovation, on-site businesses, schools, or other features should be able to incorporate a substantial portion of the recommendations described. Any project will need to tailor their planning process to their particular needs and resources. Although this section addresses group process and dynamics it is not intended to be a primer for these subjects. Members of the planning group are strongly encouraged to find out more about group process and dynamics for the best possible planning experience.

.Discussion of the planning process is divided into four stages: initiation, design, contracting, and building. The description of the process is an overview. Some ecovillages are mentioned far more frequently than others. This reflects the amount of available information. See the resources listed at the end of the chapter for further information.

Initiation¹⁸

The idea for an ecovillage can be hatched by a group, an individual, a business, a municipality, or any number of sources. It should not matter who initiates the process, as long as the resident's interests are given center stage throughout. The residents' interests are, however, easily superseded by professional or political goals, therefore I would encourage resident initiation. Resident initiation, rather than initiation by another actor, can help establish from the beginning that the residents' interests are the primary focus of the project. In Myrstacken, many details were decided before the potential residents were contacted. The city architect: "*sometimes I wonder, does the resident group really have a chance? I do not know. . . I think the project could have been different if the residents had participated from the beginning...*" [Mårtensson 99-100] Six of the ecovillages entered this first stage with the residents interests as the primary focus. (For simplification in this half of the chapter, I will refer to the future residents as members.)

The idea of the ecovillage is spread, to spark the interest of others by: newspaper announcements, a newsletter, a bulletin board, memo, advertisement by an organization or business, or word of mouth.

The first meeting is held to generate interest in the project. The facilitator(s) of the meeting should be prepared to give a persuasive and confident presentation of the seed idea. She, or they, should be able to briefly present a vision for the project and outline the process by which the project might be accomplished. A well organized first meeting will help compel people to participate further. "*It takes time to build from the ground up. It is important to have a group of motivated, knowledgeable people who can drive the project themselves.*" [Mjölnartorpet] Persons making the presentation should avoid focusing on their personal agendas and other information not directly relevant. Persons who have specialized skills and experience to contribute, will probably be intolerant of irrelevant personal agendas. They will want to be confident that a solid plan of action will be developed expeditiously. The group should strive to attract the interest of persons with professional experience. A group comprised solely

of idealists may have trouble accomplishing its goals.

The group brainstorm, at subsequent meetings, about the who, what, where, when and how of the project, in order to compile a list of ideas. Everyone should get a chance to contribute. At this stage ideas should not be deemed as good or bad, just recorded. This is a chance to be creative, and to dream; reality will set in soon enough.

Fun is important at this point. A party or other relaxing activity is a good way for members to get to know one another better and informally discuss their interest in the project. Becoming well acquainted with one another is also a good way to prepare for the next step.

“Establish a protocol for making decisions.”[Smeden] The group will need structure and guidelines for how to proceed with the meetings and to assign administrative tasks such as: taking notes during meetings, distributing information to members, keeping a roster, and managing finances. The group may choose to elect officers for the group including, but not limited to, president, secretary and treasurer. The group should elect a facilitator whose responsibility is to run the meetings in an effective manner. Refer to the Meetings section of the Social chapter for further discussion of the role of the facilitator and suggestions for organization of meetings.

Clarify and establish goals. *“A fundamental condition for success is that all members must, and will drive the project forward.”* [Understenshöjden] Not everyone is suited for living in an ecovillage, even if her heart is in the right place. *“If I had been more clear sighted I would have understood from the beginning that we wouldn't fit in. It was already clear that certain people were steering and the aesthetics would not please us.”* [Understenshöjden]

Visionaries, known as “fire souls” in Swedish, will emerge early on. These members will have more time, knowledge, and passion than others. Support these people, even when they may seem overbearing. They can drive the project forward in its darkest hour and shine when others in the group are fading. Don't let their “fire” burn out. Help these people remember that they can rest when they need to by passing the torch to someone else for a while. Do not let them be mavericks, charging ahead on their own. Work with them. Help them retain their energy and learn to cooperate (if they are acting as mavericks) The visionaries may be overbearing at times. A resident in Understenshöjden felt, *“this ecovillage is the visionaries, we others just get to live here.”* [Understenshöjden] They may be adverse to cooperation, but cooperation is required for success. They should document their actions so other's can continue their work if they do grow tired. The group may want to assign responsibilities to teams rather than to individuals. Essential knowledge and contacts should not hinge on a single person lest that person leave the group unexpectedly. The visionaries in the Myrstacken project gave up, there

were too many obstacles and the support wasn't there. After they left, the group disbanded.¹⁹ A new group of people and leaders had to be sought out by the developer to justify continuation of the project.

Effective leaders are not necessarily visionaries. Individuals with understanding, patience, and excellent organizational and communication skills are the glue that hold groups together. They are level headed and slowly garner the respect of the group. These true leaders of the project will emerge over time.

Also, be aware that there are one or more persons in the group that will quietly influence the project, pro or con. Success hinges upon those persons' guidance. These individuals, even if not officially designated as leaders, are treated with respect and sought out for guidance in final decision making.

Communication, cooperation, and trust is always necessary. Members should not feel railroaded by anyone. Even those who are quiet by nature, need to make themselves heard. Cooperation by listening is important. Besides, the quiet members of the group may emerge as the hardest workers who put in tireless hours of work to ensure the success of the project. "In [the resident] groups, effective communication (listening, validating others, and offering input) establishes a mood of cooperation and caring. Trust in oneself and others is fostered in such a setting."²⁰

"Successful communities find ways to draw on the unique strengths of their members to accomplish the group's shared objectives. Awareness that not everyone else learns in the same way or thinks in the same way you do can be very helpful in developing effective of working and playing together."²¹

Chronic talkers and dictators, see the Meeting section in the Social chapter to see how to address this and other group dynamic problems.

Start a scrapbook to keep track of your progress with photographs, newspaper clippings and other memorabilia. Members may want to contribute brief essays about their feelings and experiences during the planning process. The scrapbook may prove an excellent resource for future ecovillage projects as well as a boost of self-esteem for the residents who compiled it.

Representatives, or spokespersons for the group should be chosen to speak with relevant parties on behalf of the group. Members will have experience in a variety of fields. Choose representatives according to their skills. Representatives should take notes and report back to the group. The goals of the representative's duties should be decided by the group. A Understenshöjden resident recommended, "*Hire someone to work part-time [to represent the group]- it's worth it. Chose a person with confidence to make decisions.*"

“Teach yourselves.” [Smeden] *“It is important to be technically and ecologically capable and knowledgeable.”* [Mjölntorpet] It is *“hard work, but very instructive.”* [Smeden] The group will need to start learning as much as they possibly can about their project. In this study, residents of most projects worked hard to gain necessary knowledge, but were only partially successful. More effort was needed. Fifty-six percent of people surveyed said they gained their knowledge of ecological building on their own; 69% did not feel they knew enough.²² Some members came into the process with a lot of knowledge from their careers (engineer, architect, journalist, etc.) More help from consulting experts may aid residents in the early stages of the planning process.

[Table: II h - sufficient information]

Did you garner sufficient information from your studies?

Yes	31%
No	69%

[Table: II i - how did you learn]

How did you obtain information about environmental and ecological building issues?

Study circles	38%
On my own	56%
Other	32%

Understenshöjden, Bålarna and Ruskola had good results from organizing study circles. Several residents of these groups wanted to *“make the study circle obligatory.”* [Understenshöjden]. The study circle concept works as follows: the large group divides into smaller groups and assigns subjects for the small groups to focus on. Tasks are further divided between individuals in the study circle. The study circle meets to share information and may go on some field trips together. The study circles then report back to the larger group. Members should not join study circles on topics they already know about, rather a new area. Knowledgeable members can be invited to other study circles to share their knowledge. If the study circles are highly successful, members of the study circles become “experts” in their area of study, and the large group may decide to *“give individual groups more responsibility and allow them to make decisions based on the additional knowledge they’ve gained.”* [Understenshöjden], as long as it does not undermine the commitment to democracy.

Mia Torpe, a leader in the Understenshöjden project, commended the success of the study circle. *“People have been amazingly resourceful in these years. We vacuumed practically all of Sweden for information, we looked at examples in other countries as well.”*²³ Sharing the burden of learning can help the group gain confidence.

It can be difficult for the group to educate themselves collectively because members *“... have such different*

backgrounds which [makes] it harder to inform.” [Smeden] A commitment to establishing a base of knowledge among all members can improve the group’s confidence and abilities while working with professionals. The more knowledge the group has the greater their capacity to steer the project according to their goals.

When the differences in knowledge between members is extreme tension can result. Those who do not know what is going on can feel left out. The people who do know what is going on may become impatient with those who do not understand. Cooperation is paramount. Making certain that everyone in the group has a good knowledge of key issues is important. Knowledge collecting can be accomplished in a variety of ways. For instance:

- field trips *“Take field trips to ecovillages to see how different solutions have worked.”*
[Solbyn] General ecological building and other types of resident initiated projects would also be good sites to visit.
- conversations by mentioning their project to everyone they meet residents will invariably get new information and contacts
- guest speakers speakers from other projects and experts from businesses, organizations, the city, or universities can be invited to resident meetings
- potential actors architects and builders may be interested in presenting their ideas and skills to the group in hopes of securing a later contract
- members many people come to the group with considerable knowledge and many skills; these members might be persuaded to share their experiences
- written material articles, books, and brochures/promotional information from projects and businesses can be shared among members
- lectures organizations, universities, and clubs will sometimes hold lectures on relevant subjects and resident members can be encouraged to attend
- classes universities and folk schools (folkhögskolar) offer a range of classes on ecological topics
- videos, photographs some organizations have videos or photographs to loan or purchase

Learning should not be limited to ecological building. Other important topics include: basic ecology and environmental science; the environmental footprint of individuals - how much we consume, how our lifestyles effect the environment; financial and legal matters; possible research or other grants; the responsibilities of an architect, builder and other actors; and how to prepare and seek bids from an architect or developer.

Leaking information to the media, architectural firms, and builders is a good way to spark interest in the project and have people come to the group to offer their services instead of members having to do all footwork themselves.

Patience. Planning an ecovillage takes time. Myrstacken was designed and built in three years. Mjölntorppe

and Åkesta took four years from start to finish. Four years may seem like a long time at the outset. However, it is a short enough period of time that you can imagine its completion. The projects which took ten years have worked out well but *“ten years is an awfully long time for any household; children are born, children leave, divorces, people get new jobs somewhere else, or choose to a senior flats.”* [Söderkulla] The better prepared the group is in all facets of the process, the faster the process is likely to go.

“One of the most common difficulties that founders of communities create for themselves is to focus too strongly on the desired end result, thereby setting themselves and others up for frustration and disappointment when they discover that the process of community development takes time - usually many years.” [Gaia Trust 170] The ecovillage really begins long before it is built, the final physical structures are only a vehicle for members to live in and express their existing commitment to community and the environment. If the group focuses on creating a community throughout the process and makes the physical structures a manifestation of that community the length of time it takes to plan the project will seem more manageable.

Communication between members increases in importance as the group starts making decisions based on the information they have gathered. Every month the Hågaby group sent out a **newsletter** to all members. It contained: information about the last meeting, outlined decisions made, and summarized any discussions held with the city, architect, or other professionals. By sending out the newsletter to every member, those who are not able to attend a meeting (or those on the reserve list) can still feel connected to the process. Besides, if they have received the newsletter no one can justifiably say, “no one told me.” The newsletter becomes ever more important as emotional decisions are made towards the end of the planning process. If, for instance, the builder cannot get the windows everyone had agreed on, or the city just doubled the electricity connection fee. It is important to disseminate this information to everyone involved. When new decisions have to be made or when consensus counts it is imperative that everyone understand the situation and their options, as thoroughly as possible and as soon as possible.

The group may want to forward the newsletter to: members of the city council, the media, the professionals involved, professionals they might want involved, organizations who may endorse the concept and/or whose members may be interested in joining the group, and other ecovillages and ecovillage groups. The group may find it beneficial to create a Homepage on the Internet where members and others can find information and contribute commentary.

Establish a time bank. The Understenshöjden planning group established a time bank. Residents keep track of how many hours they spend on the project a month. In Understenshöjden residents were committed to spend ten hours a month on the project. It could be making phone calls, attending meetings, preparing food for meetings, watching the children, or other tasks. The “minimum balance” in their “time bank account” is ten hours. The time a member spends on the project beyond those ten hours increases their “time savings.” The “savings” carry

over from one month to the next. If, for example you work 20 hours in July, you might choose to take August off and not work on things for the project. If you do not work in August by September your “time savings” would be zero and you would need to work ten hours in September to fulfill your “minimum balance” requirement. The time bank can be an excellent means of avoiding potential arguments between members about who spent how much time doing what. In Understenshöjden the time a person “saved” during the planning was carried over to after the homes are built. Mia Torpe, a leader in the Understenshöjden project, said, “*myself, I have several hundred hours overtime in the time bank. Now I can be lazy in the winter while others are out shoveling snow.*”²⁴

Financial considerations, both short and long term should be assessed as accurately as possible at this point. Short term costs may include money for field trips, speakers, photocopies, or the newsletter. The findings from the financial study group can be helpful in determining long term costs such as payment for land purchase, permits, or hiring consultants and an architect.

Now it’s official. If the group has not already done so, now is the time to make the group official; to open a bank account and establish a charter. These formalities will provide the group with legitimacy, and make it easier for the group to obtain and inventory finances; and to make contacts with banks, the city, and other entities and people.

Meeting with the city can be helpful at this point to gather information about potential sites, contacts, laws, grants, and other relevant information. A member of the city’s planning department or environmental department may be willing to provide a presentation for the group. The group should prepare a brief presentation of their general goals to aid in the appearance of legitimacy and competency.

Design

“*Make a list of required specifications. Retain influence throughout the process.*” [Smeden] “*Clear vision,*” [Understenshöjden] and distinct goals will aid members throughout the process. The Smeden planning group composed a list of fifty points they wanted included in their project. The list included both general and specific specifications such as the design for passive solar heat with the option of solar panels, and “the size of the bedrooms shall not be less than 10 m².”²⁵ This list was prepared before an architect or other professional assistance was sought. The architect used this list as a guide when creating the designs. The list provided the basis of the final Smeden project. Discussions with Per G. Berg (with Hågaby ecovillage) prompted me to refine this process. (Quote from Berg)

I recommend the group create three lists.

1. An **absolute** list: would include features which define the ecovillage; the details upon which there is unanimous agreement and without which the ecovillage would not be an ecovillage. This is the most important list. It might include items such as: solar panels, healthy materials, gardening space, or recycling facilities. The members may not want to include specifics (such as a Dubbleten separating toilet) unless they are certain it is the best item available on the market. New ideas are surface frequently. Basic system specifications such as, on-site treatment of waste, is clear but does not commit the design to a particular brand or system.
2. An **important** list: would include those items which the group agrees by consensus should be included in all initial plans. These items may possibly be excluded at the last minute due to cost or other considerations, but only if all the members of the group agree it is the best choice. This list might include: collection of rainwater, a root cellar, or a greenhouse. This list can also include design preferences such as outdoor storage space for each household or a minimum size for the common house. The lists which a group creates will be unique to each planning group. The value of one item on a list over another is subjective.
3. A **preference** list: would consist of specifications which are open to discussion and advice from outside sources. The preference list gives shape to the elements in the other lists; house sizes, type of paint, type and size of parking area, floor heaters, or floor-to-ceiling tile in the bathroom. Many items may be quality-of-life details such as solid wood cabinets, a fireplace, or two bathrooms. This list will be especially important when working with the architect.

The value of these lists cannot be understated. They will form the foundation for all later decisions. The group's intentions and sincerity are exemplified in these lists. The city officials, architects, builders, and others will know what is most important to the group and can focus on preserving those points instead of making choices that might undermine the principles behind the project.

Good preparation will earn the respect of professionals. With clarity, preparation and knowledge the group's interests are more likely to be adhered to. Residents will have more control over what happens if they know what options exist and can anticipate problems. The more they know, the better choices they can make.

Long term planning should be incorporated into the lists. Families will grow, some will move away, others will move in. Consider the long term social implications of the project as well as the long term ecological implications. See the Social and Design chapters for information on what types of issues might be considered.

Changes to the list may be desired as members spend more time looking at different design solutions, and work with the architect and other consultants.

Have FUN! Don't forget. You are creating something great. Take the time to relax and to celebrate. A Swedish woman told me, *“I think the reason the Danes have been so successful at creating social and ecological housing projects is that when Danes form an organization they think in terms of parties, etc, when Swedes make one they think in terms of selecting a chairperson, accountant and a secretary - which makes it much more formalized and for many people difficult.”* I think we could all take a lesson or two from the Danes.

“Hold out!” [Tuggelite] The group can finally begin to move from thinking and talking to doing. *“Much discussion and many compromises.”* [Tuggelite] lie ahead, but *“be tough, it pays off.”* [Mjölntorpet]

The commitment of the members must be reassessed at this time before moving onwards to purchase land or hire an architect or other consultants. Are members prepared to make a financial commitment? Are they satisfied with the direction of the project?

Financial needs can be better estimated now that the group knows more precisely what the project will include. Estimates should be assessed for: land costs, an architect, and securing a loan; plus, who pays and how. A delegate from the group should be speaking with lending institutions to find out what expectations and requirements exist for securing a loan for land purchase and building costs.

Architect vs. developer is the next decision to be made. If members feel confident of their dedication and ability to do a lot of the work themselves, an architect is probably the best choice. A developer will shoulder more responsibilities, but will also steer the decisions more. An architect will still need to be consulted for the project, but if the members choose to work with a developer the company is likely to assign one of its company architects to the project. However, some developers may be willing to work with an architect chosen by the group, in which case the members will choose both an architect and a developer. Finances will also effect this decision.

Contracts are a necessity from the very beginning for consultants, architects, and anyone else working for the project. The contracts should describe the responsibilities of the contracted entity in a manner that both parties understand and to which they agree. Do not act on anyone's word, no matter how trustworthy he or she seems. Get it on paper. There is no substitute for a written contract.

“Document everything with binding contracts - define where responsibilities lie.” [Understenshöjden]

A specification document must be assembled from the lists prepared by the residents. This document will be used when seeking bids from architects or developers. The more explicit this document, the more realistic the bids from the architect or developer. From this point forward I will refer only to an architect, rather than architect or developer.

Consider the type of building contract and prospective builders. The choice of an architect will be affected by the choice of building contract. If a general contract is chosen, the architect will have to complete one more set of drawings than with a total or steered total contract.

Where the ecovillage will be located should now be discussed in earnest with the city and land owners. Sites may proposed be by the city for consideration, see below.

The preliminary site design is completed by the architect. It outlines where and what type of structures will be within the site. Additionally, an outline of the project is drawn up and presented to the municipal planning commission in order to reserve a site on the city's master plan.²⁶ The planning commission reviews the merits of the project. Possible sites proposed by the commission reflect the outcome of this review; positively or negatively.

This stage can be difficult. On the one hand, it is much easier to make concrete plans about the site design with a specific location in mind. On the other hand, the city may not be willing to propose locations until the group presents a preliminary site design. An earlier meeting with the city to explore possible locations may now prove useful. If the city was not willing to propose any locations the group will have to create a site design that might be amenable to several different locations.²⁷

Assessment of the possible sites is done by the group in cooperation with the architect and the neighbors. The group may have been able to do this earlier if the city had earlier been willing to propose a possible location.

Neighbors should be consulted as early as possible to allow time to work through potential misunderstandings and explore opportunities for collaboration.

The land is purchased.

Consultants are obtained to evaluate the soil, hydrology, and possible archeological items, on the site. The results of these evaluations will influence where and how the buildings will be built, what type of landscaping is done, and what types of waste-water treatment and other systems are best.

A landscape architect should be consulted for the site design. Consultation with a landscape architect is not an “extra.” The landscape is an integral feature of the overall design.

“Designers need to make it clear to client, builder, lending authority, and management, that landscaping, play equipment, fences, seating, and so forth are not ‘extras’ that can be eliminated at the construction phase without altering the social and aesthetic effectiveness of the whole design.” [Cooper Marcus 220]

Models are made for the project. Block models, representing the buildings (which may have already been used in creating the site design), allow members to envision a variety of possibilities and better appreciate the architect’s early sketches.

Small scale sketches are created. General design choices are made concerning floor plans. The site plan is revised. The architect usually makes some initial sketches for his initial bid for the project. Now the architect can work more closely with the group to ensure that the specifications from the group’s lists are incorporated.

“Think ahead, before - what are your motives, what and why will we have X?” [Åkesta]

Costs increase with every variation between homes and with every deviation from a standard size or construction.²⁸ The value of ecological features must be weighed against personal desires for individualized features. Although, in theory, *“Each resident should get to do their own solutions.”* [Smeden], this is not always a reasonable expectation. Members may need to focus on personalizing color, cabinets or other superficial choices instead of floor plans. Costs also depend greatly on how the builder operates. The costs of building Understenshöjden were significantly increased because the siding and frames on the houses were not the standard size for prefabricated elements.²⁹ I do not believe the members were made aware of this increased cost which was the result of an architectural choice.³⁰ **Communication** regarding these costs between the architect, builder, developer, and residents is tedious, but important. The money invested in this design choice in Understenshöjden may have been better spent on another element.

Ecological elements of the project should be reviewed at every step. Ensure that the architect, developer and consultants are following through and adhering to environmental principles and regulations.

“Patience is recommended,” [Understenshöjden] as people start to split hairs over color choice, window shades, flooring, and on ad nauseam.

Communication between the architect and the group and within the group is crucial so no one feels left out, or claims, “I did not know.”

Fun revisited. If you are feeling overwhelmed just reading this, imagine how tense you will feel when you are actually involved in it. The value of fun should not be underestimated.

Re-calculation of the costs are made once the drawings are worked through. The result of the calculations may lead to another round of discussion.

“Don’t give up.” “Hold out! Even though it is demanding, it is worth it.” [Understenshöjden]

Financing for building can finally be secured.

In TG people who wanted to leave the project could sell their bit.

Contracting

Consider construction at this point. The group may want to hire a developer who will arrange details with a builder. The members can serve as the developer themselves, or the architect can do so. If a developer is hired he will provide a professional to oversee the building process, otherwise the group should decide who should do this. The project leader may be qualified. Whomever is chosen should be able to establish a good working relationship with the project leader.

The desired type of building contract should be decided at this point. The type of contract will determine the extent of the drawings the architect must prepare, and the research the group must do on materials and systems. The members can start to fish for potential builder interest if they have not already been approached by a builder. From this point onwards I will discuss the project as if the group chose a general contract.

The details are now ironed out. Representatives from paint, toilet, window, and other companies can be invited to the group to assist members in making decisions about specific details. At this time, the group delves into the minutiae of the design. The members may want to meet with as many experts as possible on: systems, building, and decorating as possible.

Main drawings and technical descriptions³¹ are completed by the architect and landscape architect in cooperation with the group.

Environmental quality should be carefully checked. The group may consider consulting with additional experts to ensure they have not overlooked any details.

Cost calculations are reexamined and an estimated time plan established. The main drawings, cost calculations and technical descriptions will be used to seek bids from builders and to seek a building permit from the city.

Bids are sought from builders. The builders' track record for adhering to and exceeding environmental standards should be considered, as well as their appreciation for the "do it yourself" approach." Members may want to visit a site the builder is building or completed. Members may want to speak with previous clients to determine how well the builder cooperates with clients. The builders financial history and ability to complete his work on time should also be considered. It is important to ensure that the builder will seek outside help, if necessary, to ensure proper installation of systems.

Trust is of utmost important in the choice of a builder. The building company has tremendous influence over the final product. Members should be confident that they can communicate openly with him. The builder chosen must be willing to take the time to listen and respond to the group. This open communication will foster trust which will aid negotiations throughout remaining stages of the process. A detailed contract can help guarantee the builder fulfills his responsibilities, however, many discussions will occur prior to signing the final contract. Trust and communication during these negotiations will contribute to a better contract.

Patience and communication. *"The process must be able to take time. Then one has time to discuss and explain why it is how it is. The architect can explain. The builder can explain. The users can explain. It takes time to slowly come up with what is right."* [Berg interview, 5-1998]

New cost calculations will be made by the builder. If the bids are too high the group may need to consider changes.

Carefully consider changes. The builder may tell you the best way to reduce costs is to use single pane glass in the greenhouse which happened in Solbyn. The results were dismal. Do not buckle under the builder's claim to expertise. Return to the lists. What is important? A builder who tries to foist unwanted changes on the group may not be a good choice for the project. Amend the contract with the builder to reflect the changes.

"Let bidders make their own systems suggestions." [Mjölntorpet] Due to their experience they may have a superior suggestion, however, look at it from all sides to ensure that it meets the environmental standards of the project.

Self-building might be considered to reduce costs. Self-building requires the residents, rather than the builder, to finish: cabinets, floors, woodwork, painting and other details. Self-building can reduce costs and increase the members' physical and emotional connection to their new home. It is also a method of accommodating individual preferences at an affordable cost. Mjölntorpet and Understenshöjden had considerable self-building options. Some residents in Understenshöjden chose the bare bones option, where the exterior of the house was completed but the interior had only gypsum board (drywall). All carpentry, closets, and finish work was completed by the future home owner. This considerably reduced the monetary outlay for the residents, but greatly increased their time investment. The materials for completing construction are provided by the building company in the contract.

Costs for consultants should be included in the group's calculations. If the group has chosen a general contract they may want to hire consultants for: heating, sewage, ventilation, and other systems. Or, the builder can be asked to hire consultants for these tasks.

The contract with the builder should be crystal clear. It should specifically address elements of the project which may be unfamiliar to the builders: methods of applying egg tempera paint, installing insulation or solar panels, and protecting existing trees, are examples.

“Don't let developers and builders decide for themselves. Set goals and act professional. Developers don't understand 'do it yourself' approach.” [Solbyn]

Building

Construction drawings are completed by the architect. Construction drawings are large scale and extremely detailed documents.

Seek building permission from the city. The city planning commission will review the final drawings for the project, to ensure that it meets city regulations.

Ground Breaking is the formal ceremony to initiate the construction of the project. This represents a milestone for the members. It signifies the actualization of their dreams. Unfortunately, construction may not begin immediately after. It may be delayed for several months. Because of extraneous circumstances, such as loan negotiations or tax considerations, it may be prudent to expedite ground breaking even if actual construction can not be begun for several months.

Celebrate the ground breaking. **Have fun!** This party is an opportunity to reminisce about the good times residents have had in planning their future together.

Meetings will need to be held with the builder to discuss any changes which may become necessary during building. The building project leader should communicate regularly with the builder, architect, and group.

Special installation techniques required for certain systems such as root cellars, urine separating toilets, ventilation, etc. prompted numerous residents to express a desire for “*Better supervision and control of systems installation and craftsmanship, especially concerning insulation and air seals.*” [Mjölntorpet] Consultants familiar with the systems may need to be on site during installation. The group may want to encourage the builder to provide special training for its employees.

Construction is completed by the builder.

Self-building is completed by the residents. Workshops may need to be held to demonstrate the best means of executing the finishing techniques.

Adjustments are made by the builders if necessary. The builder may need to make final adjustments to the construction before residents can move in.

“**Hallelujah!**” [Understenshöjden] A victory celebration is in order. Years of hard work have finally reaped their rewards. It is time to move in and begin a new era.

Recommendations - a summary

LEARN

COMMUNICATE

HAVE FUN

EXERCISE PATIENCE

The architect, developer, and builder should:

- be familiar with, and practice, environmentally sound building techniques, and
- be open to investing the time and effort necessary to cooperate with the future residents in the decision making process, and
- be willing to give a little extra in the short term for the long term benefit to their business and the environment.

Future residents should:

- ensure their role in the planing process is clear, and remains clear, throughout, and
- be as informed as possible; through study circles, lectures, field trips, and
- be prepared to have FUN, as well as work, and
- prepare a very clear list of specifications which the project must have, and
- assertively pursue information and clarification from the architect, developer, builder, bank and other parties, and
- support one another, especially the people in leadership positions to avoid “burn out,” and
- keep one another informed of developments in written form to avoid misinformation and a sense of exclusion, and
- share information of their plans and progress with nearby neighborhoods.

Recommended Reading

I strongly urge people interested in planning an ecovillage to read as many accounts of resident directed planning as possible, whether it be an ecovillage or an apartment complex.

Bokalders, Varis and Block, Maria. *Bygg ekologi: Att Bygga Sunda Hus, Vol. 1*. AB Svensk Byggtjänst, 1997. Chapter four discusses the planning process for an ecological building project. Bokalders and Block address resident participation and focus on how to ensure ecological principles are incorporated into the project.

Cooper Marcus, Clare and Sarkissian, Wendy. *Housing as if People Mattered: site design guidelines for medium-density family housing*. University of California Press, Berkeley California, 1986. A must read for any architect or planner, this book will also provide invaluable information for a resident planning group. Cooper Marcus and Sarkissian describe in great detail the interaction of residents with their surroundings in medium-density housing. The book is full of clear

descriptions and illuminating observations.

Moeschlin, Jan; Oskarsson, Peo. *Smeden: ekologiskt byggande med brukarplanering*. Chalmers Tekniska Högskola 1996. The architects of Smeden give a wonderful and detailed account of the trials and triumphs of planning and building Smeden.

Mårtensson, Fredrika. *Att bosätta sig - en kreativ process*. Statens institut för byggforskning. Gävle, 1992. Mårtensson presents conclusions based upon results of interviews with the “actors:” (residents, architect, developer) involved in the planning of Myrstacken. She presents clear insight into the miscommunication of goals that occurred between the persons involved.

Sternberg, Håkan. *Ekobygg: 1997-1998 Produktguide för sunda och miljöanpassade hus*. Ekokultur Förlag, Jönköping, 1997. The chapter on planning and building applies to any ecological building project. Overall the book is a good resource for ecological building with many literature references and advertisements from companies in the building industry with a focus on the environment.

Tidäng, Kristina. *Att bo i Tuggelite*. Byggforskningsrådet, T19:1992, Stockholm, 1992. The first few chapters address planning in Tuggelite.

Örneblad, Eva. *Solhust i Järnbrott*. Chalmers Tekniska Högskola, Göteborg, 1997. Chapter five discusses the ecological renovation of Solhuset, an 18 unit apartment complex in Göteborg. Örneblad discusses the residents’ experiences with the planning process. Later she describes the resulting social network in the apartment building and how the shared greenhouse there has contributed to a positive social climate.

Planning Case Studies

(There will be three case studies at the end of the chapter: Ubbeholt, Hågaby and Söderkulla)

The case studies for Ubbeholt and Hågaby have not been written yet.

Söderkulla: thwarted dreams

Ten years ago an optimistic group of citizens embarked upon the creation of an ecovillage. They had grand plans; the project was originally planned to have 50 homes which soon grew to 250 homes, five clusters of 50 homes built in stages.³² Grand plans which will never come into being, at least not as an ecovillage. The project is destined to be housing with ecologically friendly attributes, not an ecovillage. The resident planning group has lost virtually all its influence over the project and two developers have set to creating a housing development to fit their agendas.

The developers are trying. They want to create a development which will attract buyers. The developers, HSB and SMAÅ, from working with ecovillage Understenshöjden, learned that people like ecological features,

they like natural features, and they like to take part in deciding what their homes will look like. HSB offers environmentally friendly “nature houses” with such features as an energy efficient washing machine and a foundation that sits above the ground - just like in Understenshöjden. They offer natural features: solid wood floors finished with oil, a fireplace designed for comfort not heat, and “large windows to let light and nature into your home” - just like Understenshöjden. Unfortunately, the houses are so close together and oriented in such a way that the windows more frequently overlook the neighbors wall than the nearby lake. Their promotional literature promises “many ways to make your nature house a personalized home. You can influence the size of your house as well as its floor plan and its interior design through many choices and extra options.” The concept of choosing the physical attributes of your house is called “home accent, for you with high expectations...for you who would have something altogether extra.”

The developers failed to comprehend the essential role democracy plays in creating a sense of belong, purpose, and community. Choosing your own floor plan and bathroom color is not what an ecovillage is about. It is not likely the reason 180 people participated in study circles for Söderkulla in the first two years of planning. With Understenshöjden HSB “completed its most thorough exercise in housing democracy ever,”³³ and with them democracy will die. Personalization is not democracy. It is not community. A healthy sense of pride, community, and purpose is what makes Understenshöjden an ecovillage, not the option to choose a red or blue door.

The developers saw this too and made an attempt. The residents of Söderkulla, now called by the developer Kullön, will “together with their neighbors have responsibility for Kullöns community questions, for example, the way in which the islands recreational activities will develop, and local services and community/social life (gemenskapen).” The common utilities in the project will be the on-site waste water treatment system and the “kretslopphus” for recycling, trash and compost. One can just imagine the scintillating encounters between neighbors that will transpire near the divine aroma wafting from the decaying organic matter. Community, to the developers, appears to mean residents making administrative decisions together once the houses are built.

Kullön will be a collection of houses with a few ecological measures. The houses will have attractive aesthetic and ecological features reminiscent of Understenshöjden but it will not be a community. Imagine, if you will, life in Kullön, a collection of strangers. They will live a kilometer off the main road and 3 km from the nearest retail stores. A handful of people will attend home association meetings to decide whether to go mushroom picking or play shuffle board. They will argue over who should keep the dank and dark recycling room clean. In three or four years residents will know their immediate neighbors and a handful of others. This may be ecological but it is not a village.³⁴

What is missing from this picture? What went wrong? How did the resident planning group lose their way? How have the hopes and dreams of over 300 citizens vanished into thin air? The sad story is not unique to Söderkulla. It is the story of a countless number of resident planning groups whose goals have been superseded by the goals of other more powerful entities.

The group started out with a charismatic chairman. He took care of everything in the beginning. He was

present at every town, business, and association meeting relevant to Söderkulla. He was not interested in democracy, however, because it only took more time. Members, *“every now and again tired to help in doing some of the work but virtually always found that [the chair] had been there before or sat on some important chair and most gave up doing anything.”* A member laments, *“I could have tried harder, but I do not have much experience in negotiating in building projects and I work full-time, I can not get to meetings for half days.”* Perhaps it could have worked, but the charismatic chairman fell ill and left the group with little documentation of his work or familiarity with the contacts he had made. The next chairman was not as active and the third even less so. The chairman’s responsibility is actually to lead and to delegate, not to take on all the work him or herself. Unfortunately, the group became accustomed to this with the first chairman. Had the second chairman been a dynamite leader perhaps he could have helped to guide the group towards greater self-sufficiency, but this was not the case.

The city council was not impressed with the group or its proposal. As could be expected, the council insisted the group work with a developer. Ecovillage groups have proved persuasive with city councils before and should insist on continuing the trend. The developers were contacted but no contract was made or signed. The group’s interests were soon subjugated to the goals of the developers. The group retained representatives in several committees, but they found, as time passed and the developers involvement increased, that their interests were listened to less and less. Then the land owner was reluctant to sell. Negotiations dragged on for several years. Perhaps if the project had been less ambitious, 25-35 households rather than 250 the group could have walked away and found another parcel. *“We thought of this, but everybody was so in love with the area.”* The site is beautiful - wooded and overlooking a lake. *“We were even asked more than once when the negotiations with the landowner were very hard whether we would consider another place, but we said no.”* Later, the Department of Public Works added an additional setback and additional costs. It insisted on a wider roadway with pedestrian and bicycle access to accommodate the increased number of persons living in the area.

Most resident planning members, even the most committed, have left or considered leaving. Two households out of the three hundred who participated have committed to moving in. Moving in after having ones dreams dashed would seem an insult. The group dreamed of having an organic gardening business on the site. Current site plans indicate that garages and a parking lot will be built on the ideal gardening space. The parking lot and the lack of a common house would prove a constant reminder of the loss of dignity, respect, and promise of a fulfilling social network.

The developers are having a hard time selling the houses, which, according to an independent architect are, even with certain ecological attributes, are not especially well designed. The houses, despite large windows are not oriented to receive much light and several dozen houses are being built on concrete slabs where the water table is low, almost ensuring water or mildew damage. The houses are expensive respective to what you get for your money. SMÅA had sold only 8 of 50 houses after four months. One can only hope HSB will learn from this experience. The company owns one in ten housing units in Sweden. Its comprehension and respect for the value of community could make a tremendous impact on the quality of life for Swedish citizens. Resident participation

may take more time and resources, but if people are happy they are less likely to move and more likely to respect and maintain their homes. The result would be mean long term savings for the company.

Söderkulla's experience is not so different from other defunct planning groups. At what points could they have intervened to improve their chances of succeeding on their terms? First a return to the mantra of planning: learn, communicate, have fun, exercise patience, and in this case, confidence. The members did learn. They organized study circles in which everyone was required to participate. "*Everybody taught everybody - it was a very good start.*" They learned about ecology and ecological building techniques. They did not, however, delve into the process of planning, nor the regulations related to planning, nor the procedures necessary for the group to maintain influence throughout the process via concise contracts with the developers. The next step would have been to create lists of specifications and a professional presentation of their project for the city council. They did create a document to distribute amongst members, but it was not presented in a professional manner to the city council. They did not identify a list of features the must have, and "absolute list;" a list specifying what they must have or else abandon the project. Communication was lacking between the charismatic chair and the residents and between the group and the professionals involved. The resident planning members were patient, very patient, but they were not confident in their knowledge which made it difficult for them to assert their agenda. The group forgot to have fun. A few members tried the first few years to organize social affairs, parties, but after a few years of trying they gave up.

Second, the charismatic leader was knowledgeable and communicative with the professionals. He was acting as a visionary but not a leader. He was blazing forward as a maverick, not facilitating the participation of the members. He did not exercise sufficient patience to help other members keep abreast of their progress. Because members did not gain sufficient knowledge and they were left out of the loop of communication, and they lacked the confidence to insist upon doing it their way; they subjugated their interests to those who "knew what they are doing."

Söderkulla, soon to be known as Kullön, should not be known as an ecovillage, but rather ecological housing. The demise of the "village" portion of the ecological village of Söderkulla should not be in vain. The members have learned many lessons which are valuable to pass on to other groups. The dream of Söderkulla can live on through the application of their wisdom to future ecovillages - communities with a commitment to the preservation of the environment in word and deed.

Sources – interviews, HSB website...

1 *Gemenskap* translated to community.

2 In Myrstacken two of the 37 households participated in the planning process. In Bålarna and Ruskola, all current residents participated in the planning process.

3 Resident in this chapter refers to potential future residents. Obviously, a person could not be a resident of the ecovillage until it was built, but an individual's participation in the planning groups began with the intention of becoming a resident, even if he later decided not to continue with the process.

- 4 Interview with Kurt Larsson, chair of Övertorneå municipal council. April x.
- 5 Very valuable and valuable combined. Very motivational and motivational combined.
- 6 This statement a result of interview. The numbers in table x for these ecovillages is not an accurate reflection the actual number of residents who had taken part in planning.
- 7 Maechel, Ingela. "Den demokratiska arkitekturen." (The Democratic Architecture) *Form for Living* (FORM), April 1995, pp. 24-30.
- 8 By professionals I mean those contracted to work for the group.
- 9 "Man blir aldrig fullärd." [Understenshöjden]
- 10 Motivation = *engagemang*
- 11 See Mårtensson's report for a discussion of Myrstacken's experience with HSB.
- 12 See Bålarna case study
- 13 Maechel, Ingela. "Den demokratiska arkitekturen." (Democratic Architecture) *Form for Living* (FORM), April 1995, pp. 24-30.
- 14 Maechel, Ingela. "Den demokratiska arkitekturen." (Democratic Architecture) *Form for Living* (FORM), April 1995, pp. 24-30.
- 15 An additional observation about the choice of a builder is that a builder with skills and an interest in ecological building, did not appear to be as sought after by the residents as an architect with ecological building skills. At the time the groups were seeking a builder very few building companies had any experience with ecological building, therefore it may not have been possible to seek out a builder with experience. However, some builders were interested, such as Skansa for the Bålarna project. Skansa, as a whole, has a poor ecological record, but the particular branch in Västernorrland was interested. This may be the case with other large building companies, or individuals within a company.
- 16 Interest = *engagemang*
- 17 In the US these laws are called zoning laws. Swedish planning boards have similar laws. The systems have some significant differences but the intent of the law in both countries is to manage development.
- 18 Significant resources for the discussion of the planning process are: Bokalders, Moeschlin and Oskarsson, resident commentary and conversations with group therapist, Jan Alan, M.S.W.
- 19 Fredrika Mårtensson discusses the experiences of the first and second groups throughout her study.
- 20 Jan Alan, M.S.W., interview 6/99.
- 21 Fickeisen, Duane. "People Skills" in *Eco-Villages and Sustainable Communities* Page 147.
- 22 Some residents gave more than one answer, therefore the totals equal more than 100%.
- 23 Maechel, Ingela. "Den demokratiska arkitekturen." (Democratic Architecture) *Form for Living* (FORM), April 1995, pp. 24-30. "Folk har blivit oerhört duktiga under de här åren. Vi dammsög praktiskt taget hela Sverige på kunskap, vi tittade en del på utländska exempel också."
- 24 Lanne, Lotta. "Björkhagens Ekoby Är Klar," (Björkhagens ecovillage is finished) *Kretslopp*, December 11, 1995, pp. 12,14,16-17.
- 25 Jan Moeschlin and Peo Oskarsson. *Smeden - ekologiskt byggande med brukarplanering*. Page #
- 26 Every city and municipality has a master plan showing current and future land use. All proposed building projects must inquire with the planning commission to determine what lots are available, who owns the land, and what type of buildings can be built on the site. Some sites are zoned for business, others for residential areas, another might be zoned for nature conservation. All cities in Sweden must also take into account the environmental impact of a project; looking at potential usage of water, electricity, transportation, etc.
- 27 In the United States, cities are not as actively involved in the selection of a site. A developer would contact the land owner directly and consult with the city planning commission to find out for what uses that location is designated. In

- the United States the substantial negotiations with the city occur when the project is submitted for a building permit.
- 28 Housing in Sweden is especially susceptible to increased cost from changes. The frame components for houses in Sweden are frequently made on a production line in a factory and shipped to the site to be assembled.
- 29 A large proportion of buildings in Sweden are built in a factory setting instead of on-site. A production line approach to building with all the appropriate machinery on site can significantly decrease construction costs.
- 30 Members wanted the siding/facade to be a continuous piece of wood from top to bottom. A seam is usually visible somewhere on the facade. The increased length of the siding elements required the builder to join/glue shorter pieces of wood together at a higher cost.
- 31 The main drawings and technical descriptions fill a similar purpose to blueprints in the United States.
- 32 *“In the absolute beginning there was talk of 50 houses, but the level of interest showed there must be more. We always fought for less houses. The landowner wanted 600 from the beginning (paid by the number of units). We could stretch to 200. In the end - after 3-4 years it was 250. Probably everyone would like 150-200 due to the area, but in clusters of about 50. I think you could say that the grand plans were the chairman’s, he did start the whole project.”*
- 33 Maechel, Ingela. *Den demokratiska arkitekturen. FORM (Form for living)*. Pp. 24-30. DATE
- 34 Even if the project were designed with resident participation it would have to be divided into many small groups in order to maintain a positive social network. Ten to twenty households is an ideal size for a social unit.