

Planning Of Sustainable City Model In Pematangsiantar

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Abstract

The increasing process of modernization in Pematangsiantar forms the characteristic of the city as a modern urban, so that the development of infrastructure in the form and supporting facilities is reproduced. Increasing the needs of urban land can be seen from the physical development and raises the phenomenon of regional expansion to the non-awakened area, with the condition, it is necessary to design with the aim to make Pematangsiantar City a sustainable town. The most desirable home model by the community is the modest home model of 71.7%, middle class house 27.2%, and luxury home enthusiasts only 1.1%. Reason to choose a simple House concept simple house decorating the house easier, the shape is simple, minimal accessories, a closer family sense, made investment, buy by using the public housing credit facilities. The Model of sustainable residential and residential development in Pematangsiantar City is vertical housing. This is based on the problem of land availability that has been still dominated by the development of site occupancy that causes residential areas to cause environmental degradation. With the vertical housing development in Pematangsiantar City will help reduce the rate of reduction of green open space land, the unit of land that used relatively smaller than the site occupancy so that the backlog can be suppressed.

Introduction

Of increasing population and activities impacting the need for larger land. The limited area of land in the city will lead to the development of the suburbs. This is what makes suburban areas an area that is experiencing dynamics in its development, especially the dynamics in land use. The dynamics of land use in the city area due to land needs for settlements and facilities and infrastructure supporting the activity of residents. The phenomenon shows that the development of a city has a tendency to raise new urban areas around the city. The occurrence of increasing population growth annually has resulted in the emergence of gaps between residential needs and the availability of residential areas including the provision of infrastructure and public facilities and services.

The modernization process of the city creates a situation of city development and population increase in the city that will be in line with the increasing needs of various aspects such as economics, social, culture, politics, technology and from all aspects of the development of modernization in the city will increase the need for greater space. Modernizing processes that have no stage and do not include rules can cause a gap in urban areas. The urban area underwent a change of function and shape into an artificial environment that has a variety of negative effects on the city's natural environment, although in view from the economic growth side has a positive effect in the development of a city but the negative effect will result in change of function and environmental form of urban climate change, city temperature increase, air quality deteriorating.

The increasing process of Modernization in Pematangsiantar City aims to establish and create the characteristics of the city as a modern urban located in the midst of Simalungun regency, so that the development of infrastructure in the form of buildings and supporting facilities is reproduced over time. Development has an effect on economic growth, however, the urban modernization process of Pematangsiantar still has inequality and gaps that need to be anticipated in urban modernization process. A spatial modernization process directed at one point of growth and development in the urban area demands effectiveness in its urban modernization process.

Pematangsiantar City should be able to streamline land as part of the concept of integrated areas that are environmentally friendly and can provide the life needs of the existing community because Pematangsiantar City has the development of the city from the police city and will evolve into a metropolis. The effect of the development of Pematangsiantar City which is heading towards modernization one of which has an impact on the urbanisation flow and the increase of population

that has a risk of declining environmental quality in urban areas. The impact of human activity on the natural environment that eventually customization degraded is a green space intended for natural ecosystems in the city has been blocked and replaced by the target environment such as residential areas, industrial areas and other building areas based on the form of urban development.

Increasing the needs of urban land can be seen from the physical development. One phenomenon that marks the physical development of the city is the phenomenon of expanding regional expansion on non awakened areas. Many people in urban areas are causing an imbalance of availability and occupancy needs. It causes the occupancy price to be high. This phenomenon also occurs in Pematangsiantar city. On the one hand, especially in consideration of increasing land price in urban areas, optimization of land utilization for housing and settlement development becomes an inevitable thing, on the other hand the potential of people who are able to have homes tend to decline, so that in many people living in dense areas, despite the slums and unhealthy. Government of Pematangsiantar with residents of course a condition of urban settlements where good city condition should be a unity of organizational system that able to accommodate social activities, culture, have a physical image as well as a strong non-physical, visual beauty and planned and integrated in a unified.

The concept of sustainable cities creates an urgent effort in providing a comfortable situation for the community while minimizing the damage to its urban natural environment. Conceptualization of sustainability based on things that can be considered in the development of areas in Pematangsiantar City. Looking at this, it is necessary to design with the aim to make the problem that is caused in the process of urban modernization Pematangsiantar City. Because with the growth of residential areas and settlements as an effort to fulfill the demand for a dwelling that is influenced by the increasing number of population density as well as the economic growth of the community, especially in the city of Pematangsiantar, impact on increased accessibility both to the region itself and between regions, and the increasing needs of various

Pematangsiantar City is one of the areas that has the fastest development compared to others. The rapid development of Pematangsiantar City can be seen from the population. Population of Pematangsiantar with an area of 79.971 km² and a total population of 253,500 people with a total of 58.333 households. Looking at this situation, governments need to make policies and cooperate with third parties to develop residential and residential developments. But the situation in the field in the implementation of residential development and settlements in Pematangsiantar still very limited both quantity and quality and yet consider the concept of residential environment and sustainable settlements.

Based on the description of the problem above the author considers urgent to get the solution in accordance with the empirical fact of the raised issue that is the problem in this research is (1) The model and housing of the most sought after by the community (2) How model development of sustainable residential and residential areas. The purpose of the research is to analyze the model development of residential areas and sustainable housing in Pematangsiantar City. The expected solution is the Government of Pematangsiantar City in cooperation with the developers by implementing sustainable residential and residential development

Library Review

City Planning

The growth of the city will result in environmental degradation. The vast expansion of land has resulted in the inefficiency of transport networks that have an impact on rising urban air pollution, while also incurring costs and wastage. Based on this in planning the city is required to approach the concept of sustainable planning. City planning, looking at the city as one of the implementation of a city plan, while the architects saw the city with the problem of his town so the effort arises to solve the urban problems practically through the arrangement of physical forms [12a, 16]. In a comprehensive city planning, the city must have a special meaning, which distinguishes it from various aspects planning process. Urban planning relates to the human sensing of the city's physical environment, especially in visual performance, aesthetic quality, and spatial character. The city environment is such that it can function well, economical to build, and gives comfort to be seen and to live in it [17].

The Green city is one of the concept of sustainable urban planning approaches. The green city is also known as an ecological city or a healthy city. It means the balance between development and development of the city with environmental sustainability. With a healthy city can create a condition of the city that is safe, comfortable, clean, and healthy to be populated by optimizing the social economic potential of the community through the empowerment of Community forum, facilitated by the related sector and in sync with urban planning [3.7]. To be able to make it happen, it takes the effort of each individual member of the community and all related parties. With the green City concept urban crisis can we avoid, as it happens in major cities and metropolises that have suffered from urban obesity, when we are able to handle the development of small and medium cities in good, among others with the provision of green open space, the development of bicycle and pedestrian pathways, the development of compact cities, and the control of the suburban area. There are several green city approaches that can be applied in city development management [1.6].

The guide in urban development is how to optimize land utilization for housing development and the integrated planned, as implied in the law number. 28/2002 about the building. Special local development regulations are required as a director of the face of the building and the environment with distinctive character, especially in the fast growing region or part of the city. While the problem of irregularities-the insignificance of the building and environment therein should be made solution solving and completion with public attention. Many government programs are made to control the pace of the developing region. Special local development regulations are required as a director of the face of the building and the environment with characteristic characters especially in the fast growing region or part of the city. While the problem of irregularities, incompatibility of buildings and environment therein should be made solution solving and completion with the general attention [21].

Many government programs are made to control the pace of the developing region. These programs are aimed at advancing and improving the general public's life, although it can be avoided if some programs look overlapping the implementation. Multi Interpretation of program implementation can cause stagnation that effects obstacles to the development of a region or vice versa, development becomes uncontrollable. These programs are aimed at advancing and improving the general public's life, although it can be avoided if some programs look overlapping the implementation. Multi interpretation of the implementation of the program can cause stagnation that effects obstacles to the development of a region or vice versa, development becomes uncontrollable [18.23].

In sustainable urban planning, there are three main principles that must be met, namely climate conformance, resource efficiency and energy efficiency, it is the basis of all components of the ecological city design, which integrates with each other. The alignment between components in ecological city design is one of the avenues for achieving sustainable development and not regardless of land use. The use of land efforts to organize development projects, both initiated by the Government as well as the growing of initiatives and non-governmental organizations in accordance with the list of priorities, so that on the one party can be achieved orderly use of land, while on the other party remains respected laws and regulations [24].

The sustainable city

Model of the urban environment has a very fast and volatile development development. Urbanization, settlements and vertical buildings, food availability, migration of organisms, garbage, energy and clean water become a problem in the city of sustainable city that is said to be healthy city, meaning the balance between development and development of the city and there is a reciprocal relationship between city life and its environment. Fundamentally the city can be viewed as a function like an ecosystem. The city should be encouraged to support the human need organically for continuous fulfillment until it reaches the highest level, where the built environment supports and is positively developed regarding the development of manusi and environmentally sound development and must involve nature in building the city into a landmark in urban planning [8.10].

Law No. 26 of 2007 on spatial arrangement and law No. 32 year 2009 on protection and environmental management is a reference to the sustainable city concept. These concepts are reflected in the formulation of a vision of a sustainable city in which it is depicted with a few visions that support the existence and purpose of the ecological city. The vision of the ecological city is to create a city that is aligned, compatible with its nature and environment, namely the planning of housing adapted with nature and consideration of biological factors, planning of building and residential areas

that are aligned with the system of life, the protection of a land to preserve the natural evolution, a design that blends with local history and characteristics, design that maintains natural landscaping, , creating living space for human beings, animals and plants and the city is a description of life, concept Ziro waste, Concept Zero run-off, green infrastructure, open space green RTH 20% and private RTH 10% [19].

The sustainable city one is to implement smart green city planning and this concept can be applied with the concept of an ecological balanced area with the effort (a). Water balancing, CO₂, and energy, (b). Area determination, architecture and transport, c. Residential area of wind corridor and reduction of the impact of heating with the development of green open space, d. Control of air circulation, the concept of rain Park. So that it can reduce even solving environmental problems, natural disasters, low air pollution, flood-free, low-noise and other environmental problems [16.18].

The terms of sustainable city development are ecological guarantees covering clean and safe air, reliable water supply of food, housing and a healthy workplace, city government services, disaster protection for everyone. Ecological sanitation should meet the efficient aspects, cost effective, environmentally friendly way of processing and recycling the results of human metabolism, waste and dirty water. The ecological industrial metabolism whereby resource preservation and environmental protection is included in industrial transitions, emphasizing reuse on materials used, sustainable production, renewable energy, efficient transportation, and human relations needs [2.6].

The sustainable urban landscape should include the unity that regulates the awakened structures, open spaces such as parks and plazas, hubs such as roads and bridges, natural components such as rivers, hills, maximizing the accessibility of the city to all townspeople while preserving energy and resources as well as efforts to reduce vehicle accident problems, air pollution, water quality decreases, and global warming is taking Ecological awareness includes helping people understand that they are part of nature, cultural identity, an attitude of responsibility to the environment and helping them to change the habit of consuming and improving their ability to contribute to caring for the city's ecosystem with high quality [19].

Normative, ecological-based city development sees how to (1) lower the driving environment such as promoting a culture of recycling, and lowering excess water use (2) improving the quality of the environment such as mass transportation use, bicycle use and walking to minimize air pollution; and maintaining environmental assets and basic resources such as the development of cities not in agricultural areas, and development towards land efficiency. Further development of a city towards an ecological-based city will provide opportunities for development of tourism and recreational networking, as well as a living laboratory center for the Science of education, production, and innovation on green technologies [21.22].

Urban Model

A city has a tendency to evolve towards the outside in all parts. Each zone grows little by little towards the outside. Because all parts are developed in all directions, the resulting pattern will be shaped like a layered circle, with the center of the activity as the point. The development of the city can be seen from various angles, one of which is by looking at the physical development. The physical development of the city can be identified one through an awakened land expansion phenomenon [23]. The city is morphologically as a certain area with the characteristics of non-agrarian land use, land use where land cover is more than the vegetation cover, complex road network patterns in a compact system of settlements and relatively much larger than the unity of settlements in the surrounding area [6].

The pace of urban development has been physically increasing the use of open land when the city area is very limited, and resulted in a change of land usage, triggering natural land conversion into an awakened area. Population growth and economic orientation put pressure on the availability of city land. The natural land-over function became an awakened area that occurred within a relatively rapid period of time [11].

The development of the Housing and settlement area of the population increase directly increases the needs of residential facilities and its supporting facility. Utility needs of settlements are often not adequately available because of the limitations of the city services where the settlement is in the area of the need for residential facilities for residents in developing countries tend to be difficult to avoid. The pace of human growth in the city requires speed balance in the provision of residential

facilities to accommodate. Various problems in the settlement sector also emerged due to lack of facilities and infrastructures supporting the life of citizens [13]. The development of settlements/housing is necessary to improve the quality of human life. However, realizing it or not, development often poses environmental problems and triggers disaster, which lowers the quality of life [14].

Every human being has varying desires and abilities, so not all that is desirable will be fulfilled. Similarly, the need for housing and settlements as a basic human need. Indeed, not every human being can fulfill that need but at least human beings always strive to fulfill it. People will never feel safe and comfortable if they do not have a home for shelter [19].

In urban areas, fulfillment of housing needs is still a big problem because besides availability and unbalanced demand, also low capability/purchasing power factor especially for poor people due to high soar housing prices. Homes and housing should be viewed as part of a residential neighborhood and a residential neighborhood is part of the environment. The expansion of areas for settlements and housing resulted in a change of natural environment that all functioned as an area of water absorption into an artificial environment that rejected water catchment. Contradiction between the necessity of housing and settlements in order to improve the welfare of the community with efforts to preserve the environment of two currencies that can not be separated from each other [12].

Housing is one of the basic needs of human beings, in addition to the needs of food and clothing, in the daily life of housing has a strategic function as a place where the perlife interacted both in terms of cultural culture, development of the young generation, the search of identity, and as well as economic assets. Therefore, housing development is a strategic sector and is an indicator of success that needs to get attention in order to create welfare for all walks of life [15]. In addition, community paradigm changes, especially in the context of ownership of a residence, tend to increase. Where, in ancient times one house in the community by several heads of households, but along with the development of the economy and population growth with easy information access makes the community recognize and know the importance of a residence not only as a place to shelter but is a process of thinking in creating living spaces for people's lives in general. In relation to this, then both formal and informal there is a housing development that is scattered and formed in a residential environment both in urban areas and in the back region of the city [20]. It encourages developers to invest in the field of housing as a business opportunity. Besides that, the growth of housing and surface in certain regions is also an element of spatial pattern forming in the context of area layout [13].

Therefore, the development of housing and settlements may require serious handling and is based on the solution and not only the slogan, but more than that implementation at the level of implementation by the actors development and the role of local governments and society become an absolute. Understanding of spatial aspects, development locations, and policy and planning issues in the framework of the business of stylist-the establishment of a residential area and settlement becomes very important

Housing and residential development environment and settlement area are important indicators in supporting human civilization. This is because the community condition in settling can be the benchmark of community welfare. The government also makes housing and residential developments a national program to create habitable homes for each family. The realization of environmental-oriented settlements is a form of high quality service from the city government to its people. To accomplish this, it depends on the role of the city government and the participation of the wider community [5]. The planning of population settlements must be on the ecological approaches to ensure sustainability. Towards the local environment, there are two principles that need to be considered (1) The ecosystem is an integral part of the population settlements so that its management to meet the physical, social, and economic needs should preserve the aspect of ecosystem balance, and (2) there must be harmonization of human-made elements with natural elements of the environment. The area is inhabited by a more stable population than the population who inhabited the area mentioned earlier, both from its settlement and from its economy [4,5,8].

The Department of Public Works RI issued the standard instruction on urban housing area planning that infrastructure is the provision of clean water, the provision of transportation modes, waste, and sanitation systems. While the facility is the completeness of the environment in the form of educational facilities, health, shopping and commerce, government, public services, worship,

recreation, culture, sport, and open field and the administration of law No. 1 of 2011 on housing and residential areas is expected to strengthen the commitment of all stakeholders in order to fulfill the needs of the community for residential and healthy settlements, clean and environmental sustainability. Not the availability of City utility master plans, as well as not insufficient regulations that restrict the expansion of house building encourages the occurrence of environmental degradation and the destruction of the settlement area. Settlements or residential areas tend to be vulnerable to flooding. The drainage system discompressions and diminishing areas due to uncontrolled growth of settlements are only a few of the most common causes of flooding [19].

Developments in Pematangsiantar run faster. The implementation of residential development and settlements in the urban areas should always pay attention to the arrangement of the prevailing space in the location concerned so that there is a synchronization or suitability of the city's utility master plan.

Model Housing

a. Model Simple House simple

House generally includes one floor occupancy with a building area of less than 90 square meters. This residence does not contain elements of luxury, and every aspect is designed in such a way as to be appropriate. There are some residences that are classified into simple houses, such as the most popular type 36, 45, and 60 houses on the market. Type 36, usually in it there are 2 bedrooms, 1 living room that blends with the living room, kitchen, and 1 bathroom. This House is suitable for those who already have one child, but want a house that is not too big. Type 45, as the name suggests, the Type 45 occupancy has a building area of 5 square meters. The wide division can be 6×7.5 or 8×5.6 meters, and is usually built on a land area of 96 square meters. The layout inside the building is not much different from the type 36. Namely 2 bedrooms, 1 bathroom, 1 living room that blends with living room, carport, and a fairly spacious house terrace. Only, the area of each room is a little wider and airy. The type 60 residence has a building size of 6×10 meters. Compared to the previous two types of residences, the house is much wider. The building consists of 3 bedrooms, 2 bathrooms, 1 living room, a living room, a car garage, and a house terrace. However, because of the modest house, the price is still affordable.

b. Middle House Model

Spacious house building ranging from 90-300 square meters. Then the building consists of two floors, so it looks spacious and comfortable. In a layout, generally the middle House consists of three to four bedrooms, coupled with a special room assistant household at the back, Middle House is the House type 90, which is spacious building reaches 90 square meters. The division of the length and width of this House can be 10×9 , 11.25×8 , or 15×6 meters. But one similarity, the final area of the building is 90 square meters. Its size is much larger compared to the types of simple houses, making this building have more space in it. There are usually 3 bedrooms, 3 manadi rooms, living room, living room, dining room, kitchen, plus a household assistant room at the back of the house. The next intermediate occupancy is type 120. If viewed from the outside, actually this House already looks like a luxury dwelling. But actually, 120 square meters of buildings are still included in intermediate House class. Although that has it, the community with the economy class is in the upper. The number of rooms in it can be more than 90 type houses, or perhaps the same, with a wider size. The size of the building and the spacious room make the owners and developers can create more freely in the design.

c. Luxury home

Luxury Homes is a commercial home with a larger selling price with a building area of more than 300 square meters inside a luxury residential category. In the view, the luxurious residence certainly looks more elegant, bigger, and also more attractive. Spacious land allows the owner to design a variety of rooms according to their functions. Generally, you'll even find a gym, a recording studio, to a private sauna inside a luxury house. If the Coordinating Minister of Housing Regulation of the Republic of Indonesia number 7 year 2013. About the amendment to regulation of the Minister of Public housing No. 10 year 2012 concerning housing and settlement area with balanced residence.

Research methods

Of research methods used in this research are quantitative descriptive methods. The analysis used is a quantitative descriptive analysis with the provisions of SNI 03-1733-2004 v 2, scoring with the Likert scale. Based on the existing population as much as 58.333 KK, in sampling this research using Slovin formula of 397 KK. The selected type of sampling in this study is random sampling.

The results of the study and the discussion

a. Of housing models that are most desirable by the city community Pematangsiantar City

Simple house in demand by the society amounted to 71.7%, this is because the community claimed that the house is a palace for him, although the house is small and minimalist, but when the house belongs to itself, it will be comfortable to stick to it. Modest homes are now increasingly liked by society because it has led to the concept of a minimalist home. For recently married young couples, the minimalist house type 36 is the most booked. This type of house is not too small, nor too big so it fits a small family. Overall, the homely House has a unique concept and good-tasting eyes. The reason for this simple house is considered minimalist and very desirable is because (1) practical, the concept of a simple house is different from a luxury giant house. The simple house looks more practical, both in terms of concept and building decoration. The necessary items in the minimalist house also do not need a giant size. Because of this, the layout looks more comfortable visually. (2) Home decor easier, in terms of size, minimalist house has a small size. Although small, it does not reduce its aesthetic value because the small size makes this House more easily decorated and the decoration needed is quite simple and certainly more cost-effective. (3) Simplistic, simple shape and small size make the house look simpler, especially from the outside. This type of house is perfect for individuals who are simple, but have high elegance. Because usually the outer view of simple house is very minimalist. (4) Clean-net much easier, clean-house is the reason why simple homes are increasingly in demand. The size of a small house makes no distress while cleaning the house. Every part and corner of the house is also easy to reach and cleaned, no need for household assistants because it can clean the house itself every day. (5) Minimalization of furniture, Sedrhana House does not need super complete furniture. With small and tiny furniture, the house looks more aesthetic and is able to decorate the house to look more neat and nice. (6) Minimization of home accessories The adjustment between the shape, concept, and accessory of the house is crucial. In addition to the many accessories needed for your home, by adding simple accessories, your minimalist home can look more aesthetically pleasing. (7). Adding a sense of family, a simple house can add a sense of family. Because of the small house size, family members can gather easily, so that communication between parents and children is maintained. (8) Suitable for investment, in terms of investment, home Sedrhana has a very promising opportunity. The price Range of minimalist houses is also not too expensive. Enough with Rp100-130 million and can already get one minimalist house for investment. (9) Buying a house by means of an alias using KPR facility. With certain installments each month makes financial arrangements easier. Especially for office employees who have previously contracted the house because they have routinely set aside monthly salary, as time goes by installment will feel light. Because a modest home is for a liveable dwelling and its price is affordable by low-and medium-income communities.

Enthusiasts of middle-class homes in Pematangsiantar City only 27.2%, this is due to the income of the Community has not been able to meet the needs of a decent life, the community whose interest is that the class has the economy of the classes to the top to have the power of home buying. Especially the community of economy class to buy this House is used as a personal asset because the asset is a tangible resource owned by a person. This is what makes a person tempted to immediately invest in the property field, his name investment certainly for the long term and have to think about the future of investing because the price of investment in the property business will never go down. Properties can be sold at any time because the number of fans of the House will never diminish, this is certainly the reason why there are so many residential housing established and the price of investment will not go down so the owners do not have to worry about loss.

Enthusiasts of luxury homes in Pematangsiantar City only 1.1%, it is caused by a large house to be an option for the rich. The rich people certainly love to live in a large luxury home, with great economic power modifying his house to look like a palace. A large house can be a symbol of wealth

that determines one's caste. As the result is not strange if many houses are large but the occupants are not so much, the large house is precisely less desirable by millennials. Especially if the big house is only filled by a few occupants in it. Then this can create the instability of the house dwellers. Today no one likes a big house because the millennial likes simple and practical things to build or buy a house to fit the number of occupants in it. If the members are few, then a small and functional house can be the right choice.

b. Model development of sustainable residential and residential area in Pematangsiantar city.

Based on the results of the field survey conducted the realization of residential development and sustainable settlements, can not be removed from urban development as a whole, especially when associated with the availability of land by providing logical consequences on controlling residential development and urban settlements in order to meet the requirements of the city that belongs to the environmental category of city. In order to maintain sufficient availability of RTH in residential areas, fulfilling the needs of decent and affordable housing for the whole community and the realization of a harmonious and efficient societal social life.

The development of residential and residential areas are very necessary to be applied in Pematangsiantar through the development of vertical housing. The selection of vertical housing in Kota Pematangsiantar as based on several considerations, among others: one of the cities in North Sumatra is very rapid growth, as one of the capital Buffer city is very strategic, the population level of commuter including high category, RTH condition and agricultural land damage is still not very severe, is the territory that is the target of housing development because it has a strategic area

The development of vertical housing in Pematangsiantar city as a metropolis has become a necessity. The Problem of land availability is a driving factor for various stakeholders to immediately think about the pattern of residential development and settlements that have been still dominated by the development of site occupancy. There have been many changes in the function of productive agricultural land into housing, it certainly causes residential areas that in turn will lead to environmental degradation. In line with the efforts of residential development, sustainable settlements and urban Ministry of Environment on the development of vertical housing towards sustainable residential development has been conducted in the developing city in Indonesia, while striving to meet the needs of home for the whole family in one party and maintain the environment quality, especially the availability of green open space as one indicator of sustainable urban environment on the other , then the model of vertical residential development needs to be applied immediately to cities that still have ample green open space and the growth rate of home needs quite significant each year. With the vertical housing development, it will help reduce the rate of reduction of RTH land. The construction of vertical housing with a land area relatively smaller than the site occupancy gives the opportunity to provide more houses so that the backlog can be suppressed.

Conclusion

Of the development of settlements and housing should pay attention to the quality of the constituent components of the settlement so that the quality of residential environment and housing is relatively high so as to improve the welfare of people living in the settlement For existing settlements and housing conditions need to be improved especially in low quality such as availability of RTH, the level of environmental quality in settlements and housing should be improved so that the quality of the environment better again. Planning the model of residential area and housing in Kota Pematangsiantar is a model of vertical occupancy based on: Public interest in a simple model house, help reduce RTH land, pay attention to the conditions in the region and around the region, comprehensively pay attention to the carrying capacity as well as the power of environment in the residential area.

Advice

Pematangsiantar City in the development of settlements and housing to apply the model of vertical residential area to create a sustainable city

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