

# Position Paper - Energy and Climate

### **Foreword**

One of the primary challenges today is a radical reduction in our climate impact – both at the global and local level – while, at the same time, safeguarding national energy supplies.

Municipalities, county councils and regions play an important part in the energy and climate process, and also take major initiatives. There is also a clear political determination to extend such initiatives and to contribute to effective co-operation in this area.

This position paper presents the views of the Swedish Association of Local Authorities and Regions (SALAR) on energy and climate policy. The position paper was adopted by the Association's Board on 9 May 2008 as a basis for contacts and discussions with the Government Offices and other parties. It may also provide support to SALAR's members in the implementation of their assignments.

Although many of the points presented refer to long-term factors, some deal with more specific proposals that may be modified in the light of ongoing processes and the rapid developments in this area.

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## SALAR's standpoints

Sweden's municipalities, county councils and regions are prepared to assume responsibility for a broad range of initiatives aimed at safeguarding energy supplies, fostering social changes to reduce climate impact and adapting to climate changes. In order to highlight the local and regional perspectives in energy and climate policies, SALAR has adopted a number of standpoints and proposals that are further developed in this position paper.

If municipalities, county councils and regions are to be able to handle energy and climate issues effectively, central government must assume responsibility for the establishment of long-term and ambitious goals, strategies, regulatory structures and economic policy instruments.

The central government's responsibilities include extensive investment to develop a transport infrastructure with a clear climate profile. Better central co-ordination is called for in community development, in terms of investment, operations and regulatory structures. Regulatory structures need to be adapted to enable local authorities to adopt a climate-smart approach when developing urban and regional planning activities. Local authority planning must be supported by cohesive and appropriate knowledge base provided by central government authorities. The Government must also support and clarify opportunities for addressing climate concerns in public procurement processes.

Municipalities, county councils and regions must be included in the national climate policies, and have access to the advisory Commission on Sustainable Development and other similar forums.

In brief, the central government must:

- establish long-term objectives, ground rules and general economic policy instruments,
- support municipalities, county councils and regions in their energy and climate endeavours
- include municipalities, county councils and regions in national energy and climate policies.

Municipalities and county councils would like to do the following once the appropriate prerequisites have been established by central government:

- help promote reliable and competitive energy supplies, and
- invest in public transport and an efficient and sustainable transport system.

Municipalities and county councils would like to take the following independent initiatives:

• expand environmentally-friendly energy supplies,





- invest in the efficient use and conservation of energy,
- engage in climate-proof public planning,
- stipulate clear energy, environmental and climate requirements in public procurement processes
- encourage a dialogue with citizens and greater civic participation.

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## Starting points

### Energy is both a limited and an unlimited resource

Access to cheap energy has been a cornerstone in production and community development ever since the Industrial Revolution. Today, global economic growth is closely linked to a high and rapidly increasing level of energy consumption, which requires reliable and competitive energy supplies.

Around 80 per cent of the world's current energy mix is based on fossil fuels. The availability of oil and gas is expected to decline within a few decades, while it is estimated that coal reserves will suffice for several hundred years to come. The primary problem, however, is not potential shortage of fossil energy resources, but rather the climate impact resulting from their use. The IPCC, the UN's Climate Panel, has established that the carbon dioxide emissions released into the atmosphere in connection with the burning of fossil fuels have a very serious impact on the climate. Even if emissions of carbon dioxide were to cease or diminish, concentrations of greenhouse gases will continue to increase for many years before they decline again. In other words, countries all over the world must not only reduce their emissions of greenhouse gases, they must also prepare to deal with the impact of climate change.

Currently, the major alternative sources of energy are biofuels, hydropower and nuclear power, although these are not problem-free either. In many cases, hydropower involves an undesirable impact on the natural environment, biofuels have alternative applications as raw materials and foodstuffs, and nuclear power entails risks that are well-established. Biomass also plays a key role in carbon dioxide storage. As a result, these sources of energy must be used and developed in a responsible and sustainable manner. Continued use of biofuels for vehicles calls for investments in the development of second generation of biofuels.

At the same time, the earth provides almost unlimited access to sources of renewable energy. The influx of solar energy is roughly 10,000 times greater than our consumption of energy, and the possibilities of using direct sunlight and wind power by applying current technologies are relatively good. In recent years, wave energy has also become a feasible alternative. However, these sources of energy are only available to a limited extent at commercially viable prices. As a result, the supply of renewable energy is already a question of price and economic policy instruments. By targeting investments in research, development and applications could generate considerable opportunities for making such sources of energy more efficient and cost-effective.

#### The EU and Sweden are forcing the pace for a switch to secure energy supplies

In early 2007, the Commission announced a new cohesive energy policy for Europe, indicating that Europe must act to safeguard sustainable, secure and competitive energy supplies.



The EU has taken on a leadership role in limiting global emissions of greenhouse gases and has undertaken to reduce emissions of greenhouse gases in the Community by at least 20 per cent by 2020, in comparison with the levels in 1990. At the same time, the EU's target in international negotiations is that developed countries should reduce current emissions of greenhouse gases by 30 per cent by 2020. In addition, efforts should aim to reduce global emissions of greenhouse gases by up to 50 per cent by 2050, in comparison with 1990. This means that industrialised countries will need to reduce their emissions of greenhouse gases by 60-80 per cent.

Sweden is one of the few countries in the world that has managed to combine economic growth with reduced emissions of greenhouse gases. Sweden has a high proportion of non-fossil energy in the form of biofuel, hydropower and nuclear power. On the other hand, Sweden employs high-grade electrical energy to a relatively large extent in the housing sector and industry, and in terms of energy efficiency only leads the way in certain areas – Sweden's passenger vehicles account for the highest levels of fuel consumption in Europe, for example.

### Municipalities, county councils and regions have key roles to play...

Municipalities, county councils and regions have an important part to play, and are taking major initiatives in the energy and climate process. Key areas include helping to expand environmentally friendly energy supplies, encouraging more efficient energy utilisation and conservation, increased investments in public transport and the infrastructure, "climate-smart" planning, and public procurement with a climate profile. Local and regional policies are a crucial platform for encouraging a dialogue with citizens and civic participation.

Through various forms of co-operation, municipalities, country councils and regions can, at local, national and international level, improve knowledge and raise awareness of effective energy and climate solutions as regards technologies, applications, planning and community development.

#### ...in co-operation with the business sector and research community

Participation by the private sector is crucial for successful energy and climate endeavours. The business sector has both the experience and the potential for achieving greater efficiency and making the switch. Environment-driven business development is a prerequisite for sustainable growth.

Public bodies can to a greater extent work with the business sector and research community to develop systems, products and services that make a switch to sustainable and climate-friendly energy utilisation feasible, while also ensuring safe and reliable energy supplies.

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<sup>&</sup>lt;sup>1</sup> The Climate Process in Municipalities, County Councils and Regions. SALAR report, July 2007.

9 May 2008



# **SALAR's standpoints**

# 1. Establish long-term goals, ground rules and general economic policy instruments

There is a need for clear national objectives for energy and climate policy, to lay the foundations and support the various participants and types of co-operation. One of the tasks for municipalities, county councils and regions at their respective political levels is to specify the national goals in concrete terms, and establish their own targets. In order to be effective, the work to achieve these goals must be co-ordinated more efficiently between the various levels and involve a greater degree of control. There must also be scope for variations that take local conditions into account.

Ambitious and long-term economic policy instruments are required. Pending effective international economic policy instruments, Sweden should not cut back its own ambitions. Long-term investments that benefit the climate and the environment call for clear ground rules and strategies for different types of energy. Abrupt changes in regulations and taxation hamper effective planning by local authorities and companies in the business sector. Economic policy instruments that promote environmentally driven business are one way of ensuring that Sweden is able to compete.

Emissions trading and other forms of economic policy instruments should be employed to ensure that Sweden's industry, conversion of energy production and transport sector remain competitive in an international context. For the most part, economic policy instruments in the field of energy and climate policy should be of a general nature, and co-ordinated within the EU and at the global level, to ensure that measures are taken in areas where the greatest cost-effectiveness can be achieved. The EU system for trading in emission allowances is one example of such a policy instrument and, if the system is to be effective, emission allowances should be auctioned in a competitively neutral manner. Free allocation of emission allowances should be confined to industries subject to competition from outside Europe. Alternatively, the cost of emission allowances should be neutralised for exports and imports.

Swedish carbon-dioxide tax should continue to separately take into account energy-intensive industry and highly efficient cogeneration plants based on natural gas. Otherwise, there is a risk that such cogeneration (combined heat and power) plants will suffer from competition from coal-based power supplies from neighbouring countries with lower tax and more generous allocations of emission allowances.

The system of green certificates has actively promoted the expansion of electricity production based on renewable sources of energy. As a result, the recent raising of targets and the extension of periods is a positive factor. In its continued climate



endeavours, the central government should also consider the possibility of introducing market-based economic policy instruments to encourage the efficient use of energy – for example white certificates.

# 2. Support the energy and climate initiatives taken by municipalities, county councils and regions

Establish arenas for learning and interaction between government authorities, local authorities and regions, the research community, the business sector and other participants, in order to take advantage of and develop new economic and technical solutions in the energy and climate field. Central government should support initiatives and make climate policy more concrete, for example by developing a basis for planning, methods and indicators for the process of reaching set targets. Pioneers should be given a key role in the process. Their experience should be put to good use and their know-how should be shared and developed further as part of the national strategy.

Investment subsidies are essential, and should be simplified. In some cases, targeted government subsidies may be justified, for example in the climate field, involving joint financing on the part of local authorities and other players. There is a wealth of experience to be drawn from initiatives taken at national level regarding investment subsidies and EU policies and programmes. The interest in assistance of this nature remains considerable. Support of this kind should have a long-term focus, and should be simplified considerably. Previous backing for climate-investment programmes should concentrate on more direct investment support, for example investments in public transport and more efficient energy utilisation in older suburban housing development programmes. Smaller municipalities must be able to receive support and documentation to initiate their own local energy and climate endeavours. Resources should be made available for urban development to achieve sustainable solutions.

Some of the funds allocated should be distributed on a regional basis to local authorities and other players in accordance with joint regional priorities. Assistance should also be linked to, and facilitate, EU support and project systems. Co-operation with the business sector is a key factor.

# Make municipalities, county councils and regions part of the national energy and climate policy

Give municipalities, county councils and regions a role in the advisory Commission on Sustainable Development and other similar forums. The policy focus at local authority and regional level is on overall solutions that satisfy the economic, social and ecological dimensions of for sustainable development. Municipalities, county councils and regions play an important part in this process, and are taking major initiatives in the energy and climate process. There is also considerable political support for extending these initiatives. This makes local and regional



participation in energy and climate policy an important factor. Municipalities, county councils and regions are essential partners for central government. SALAR is prepared to participate in continued dialogue on policies, methods, areas for action, and policy instruments.

## 4. Expand environmentally friendly energy supplies

Take advantage of the positive climate performance of district heating, district cooling and cogeneration and their potential for efficient energy supplies. Utilise waste heat and ensure that the potential resources for district heating are used for power production to the fullest extent possible. Continued expansion of district heating, district cooling and cogeneration depends on a regulatory system that promotes and encourages the greater use of the potential of such systems. An expansion of this nature involves considerable investment, and is thus not without risk, hence the need for clear and long-term ground rules. This trend is being accelerated, for example, by the current system of "green certificates" for renewable electricity supplies.

Avoid tendencies for monopoly pricing and the maximisation of revenues. Open up the district heating network for other energy suppliers, without undermining the basis for long-term investment in cogeneration. The pricing review system which the industry itself has advocated should be further developed.

A national strategy for the development and utilisation of biofuels is called for. The central government must conduct a dialogue between the parties concerned as regards strategic choices, the infrastructure, co-operation, etc. There is, for example, considerable local interest in and significant potential for the production of biogas that warrants further development and support.

Invest in pilot facilities for the production of second generation biofuels, based on forest raw materials and bio-refineries. A large-scale investment in biofuels must be balanced against other resource requirements in the forestry, chemical and food industries, and also against any negative impacts on the countryside and biological diversity.

If new taxes are introduced, the experience of the participants involved must be taken into account in order to ensure that such taxation has the desired effect. We question, for example, taxation on waste incineration and the way that electricity taxation, in some cases, has a negative impact on the utilisation of waste heat. The tax on waste incineration should be phased out or changed. Experience indicates that this tax does not serve its purpose, is difficult to apply and is an obstacle to the fulfilment of the public sector's environmental ambitions. An example, which illustrates this point, is that the tax encourages the extraction of energy from materials other than household waste in water-heating plants and cogeneration facilities. It is difficult to predict the tax cost, and the reporting and verification of this tax is problematical.



The permit process for wind power installations must be speeded up, as a result of changes in the legislation that remove the requirement for double regulation under the Planning and Building Act and the Environmental Code. The potential of wind power is inadequately utilised, although many municipalities are actively planning for wind power installations, often in close co-operation with the business sector. Special initiatives are required to ensure that the distribution networks allow for a greater role for wind power.

# Establish the prerequisites for secure and competitive energy supplies

Sweden needs long-term, secure and sustainable energy supplies and a reliable electricity supply system. Electricity supplies tend to be insufficient to meet all needs in cold winter conditions. As a result, maximum ratings must be reviewed and in focus as a critical factor for the satisfactory provision of services. There must be increased investment in improving the reliability of energy distribution to end-users.

It is important that the EU takes the initiatives for dialogues with producers, transit countries and other international parties concerned in the energy market, as proposed in the Commission's Green Book on sustainable, competitive and secure energy. The measures proposed are designed to achieve a more open and integrated European energy market in which physical and administrative bottlenecks in the grid system are removed in order to enhance competition in the energy sector.

Integration and deregulation must be implemented to ensure increased production and safeguard energy supplies. Experience needs to be drawn from the deregulation measures already implemented, for example in the Nordic electricity market, where pricing in line with marginal cost has resulted in higher prices for consumers, and contingency production capacity has been reduced. Furthermore, the rules must not undermine the basis for electricity-intensive industries.

## 6. Invest in efficient energy utilisation and conservation

Sweden has a high per capita consumption of electricity, both in industry and the household sector, and relatively low electricity prices. In an integrated European energy market it may be assumed that electricity prices will increase significantly. National energy conservation will be a key factor in coping with the transition in the energy field. Industry needs to further improve its use of energy in order to maintain its competitive position.

Exploit the potential of joint systems solutions between industry and energy production in areas such as waste heat, heating, cooling and power genera-

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<sup>&</sup>lt;sup>2</sup> Com (2006) 105



**tion.** The public sector can also assist the business sector by indicating the potential available, and in the form of advisory services, environmental supervision, etc.

The EU's Energy Services Directive<sup>3</sup> must be implemented with appropriate forms of support and reasonable incentives. Introduction of the Directive in Sweden must be based on the experience already gained by municipalities, county councils and regions, and in the business sector. An energy audit of properties is a key aspect. Local authorities require assistance in initiating a systematic energy process in accordance with the Directive.

Special investments aimed at improving energy efficiency should be undertaken in properties with poor energy performance, for example many suburban development areas from the post-war period. Special central government grants or loans may play a crucial role in these extensive investments.

More options are required to encourage improved energy performance in properties. The energy requirements in building regulations should distinguish between various types of energy (electricity or heating/cooling) and the way in which such energy is produced. It is important to discourage the use of electricity.

Reduce the bureaucracy in connection with energy declarations and release resources for energy conservation. Swedish municipalities, county councils and regions occupy about 65 million square metres of premises. Since they both build them and manage them, they can take a long-term and cohesive view of investments and running costs over time. The regulatory structure introduced on the basis of EU regulations involves excessive administrative requirements. This applies, for example, to the EU directive concerning energy performance of buildings, where, in addition, the tight time frame presents problems for municipalities, county councils and regions.

# 7. Invest in public transport and an efficient and sustainable transport system

There is huge unexploited potential for reducing emissions of greenhouse gases in the transport sector – for example through investment in rail transports and other forms of public transport, energy-efficient vehicles, car pools, economical driving techniques, cycling, etc.

The central government must increase its investment in the transport infrastructure by a substantial amount. This should be accomplished with a clear climate profile, accompanied by significant and wide-ranging investments in public transport. These initiatives need to be combined with other economic policy instruments to reduce the need for motor transport and to increase the incentives for not travelling by car. A higher proportion of transport by rail is essential,

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<sup>&</sup>lt;sup>3</sup> 2006/32/EC. Directive 2006/32/EC of the European Parliament and of the Council on Energy End-use Efficiency and Energy Services.



both for goods transport and commuting – the latter applies chiefly in the major conurbations. Public transport should be developed in accordance with transport policy decisions and regional development policy, which also calls for investment in roads.

A co-ordinated national transport policy is required, as well as greater coordination between the various forms of transport and providers of such services. This applies for the transportation of both goods and people. Improved co-ordination between local and regional public transport and the national rail network is called for. Sweden should also aim for the improvement and coordination of rail networks within the EU.

Aviation should be included in the EU system for trading in emission allowances, and allowances should be allocated by auction. SALAR is opposed to a unilateral tax on Swedish air transport due to the need for a neutral basis for competition. Due to considerable differences in the competitive situation in international transportation and, for example, energy-intensive industrial operations, a separate emissions trading "bubble" should be considered for the aviation sector and/or transportation.

A kilometre tax on heavy road transports is needed to provide a policy instrument with a more neutral impact in competitive terms than the current taxes on fuel. This may have a significant climate impact, taking into account local environmental factors and road wear. It may also include a carbon dioxide tax, or be co-ordinated with such a tax or with emissions trading. However, a kilometre tax must take into account regional policy objectives and geographical factors for industries with long transport routes. It must also take into account international competitiveness.

Policy instruments in the transport sector should encourage reduced emissions of carbon dioxide. Tax deductions for travel should be modified to ensure that they do not simply favour travel by car. In order to encourage alternatives such as public transport and cycling to work, and indeed other forms of preventive health care, employers should be entitled to make deductions for such costs, and employees should not be taxed on benefits of this nature.

**Reduce vehicle fuel consumption.** By adjusting the existing system of taxation and incentives is (tax on the imputed benefit of a company car, vehicle tax, scrapping incentives, etc.), vehicles on Swedish roads will be replaced more quickly and their energy consumption reduced to the considerably lower level seen in other EU countries.

**Develop environmental vehicles and environmentally friendly fuels.** Central government should issue an official definition of an environmental vehicle that is applied uniformly in various types of legislation, and gradually becomes more stringent in the course of time. It should be supplemented with a classification



system for different performance categories. Energy efficiency requirements for vehicles that can operate on biofuels should be tightened up.

## 8. Climate-proof planning

The physical planning undertaken by local authorities provides an important arena for the achievement of a climate-proof and energy-efficient social structure. This involves the location of the infrastructure, workplaces, retail outlets and housing in order to minimise transport requirements and promote energy-efficient transportation. It also involves extension of district heating facilities and wind power installations. At present, municipalities can stipulate energy requirements for the development of land owned by the municipality, but can only assist in drawing up voluntary agreements for energy performance in the case of land that is not owned by the municipality.

Reinforce opportunities for climate-proof planning. The part played by general plans in steering development must be strengthened if municipalities are to take climate factors into account when selecting appropriate locations for development. There must be greater opportunities for safeguarding overall standpoints in detailed development plans. Detailed development plans should stipulate requirements regarding measures to improve safety and prevent damage in order to eliminate or minimise the risks associated with a natural disaster. On land owned by other parties, municipalities should be able to take measures regarded as significant for the protection of the surrounding buildings. Greater opportunities for stipulating better energy performance and district heating for new construction should be developed.

Central government must provide free planning documentation and analysis tools that have been adapted to the needs of municipalities, county councils and regions. This will enable local authorities to make relevant assessments and take responsibility for reducing climate impact in their physical planning operations. Future climate changes and extreme weather conditions must now be taken into account at the planning stage. In the future, new planning requirements will make considerable demands on local authorities that are already working hard, with limited resources, to comply with existing legislation and objectives. The need for documentation and better national altitude data is a matter of some urgency, and central government is clearly responsible for such matters. Cohesive energy and climate statistics for the local and regional levels need to be developed.

Financing solutions must be drawn up to clarify how to handle natural phenomena of an exceptional nature which involve severe problems for society as a whole. It must also clarify how to address the matter of costs for reconstruction and subsequent tasks, and specify the party with the main responsibility for these.



Allocate resources to municipalities to be able to share the responsibility for reducing climate impact and improving climate adaptation. Appropriate planning measures call for support in the form of expertise as well as financial resources. The assistance provided for municipalities in planning wind power installations in 2007 and 2008 is a good example of this. Greater regional planning coordination and the development of new methods will be required to achieve physical and transport planning that promotes resource-efficient transport solutions.

Co-ordinate central government operations and regulations to permit a holistic approach for climate-proof physical planning. The sub-optimisation of various environmental issues gives cause for concern, and the goals currently being drafted by the government authorities, sector by sector, do not support municipalities' aims to achieve climate-proof total solutions. Modify the application of the environmental quality norms for air and the ordinance concerning noise in the surrounding environment so that they do not result in less concentrated development in built-up areas, which would clearly be counter-productive in a climate context. Central government should permit much more active measures close to sources of disturbance.

# 9. Stipulate clear energy, climate and environmental requirements in public procurement processes

Public procurement processes have a considerable potential influence on production and consumption. Jointly, annual procurement operations by central government, municipalities and county councils represent a total of SEK 400 billion. Environmental requirements are in a relatively large number of instances stipulated by county councils, municipalities and central government, but evaluations indicate that this could be done in a better way, and applied to a greater extent. The EU Procurement Directive of 2004, which was incorporated into Swedish legislation in 2008, has increased and clarified the possibilities of stipulating environmental requirements. It is important to develop co-operation with the business sector in this process, for example in technology procurement.

Central government should facilitate application of the legislation and increase its efforts on developing tools for stipulating energy, climate and environmental requirements in the procurement of goods and services. The tasks performed by the Swedish Environmental Management Council in this area should receive greater support. There must also be better access to information about energy and climate performance for goods and services.

# Focus on a dialogue with citizens and a greater degree of civic participation

Focus actively on a dialogue with citizens, communication, non-formal adult education and influencing public opinion in order to achieve greater aware-





ness and an energy and climate-smart lifestyle. Lifestyle and consumption patterns – for example travel and food habits – play a crucial part in energy utilisation by consumers and their climate impact. As a result, all citizens have to be involved. We must be able to indicate how a change can be achieved, and not simply that a change of this nature is needed. An open and active dialogue is called for in order to reach the general public and achieve a change in behaviour patterns.

Central government needs to prepare readily accessible information that can be adapted at the local and regional level. Municipal energy advisory services should be supported and further developed. Politicians at the local and regional level have a key role to play in contributing to a dialogue with citizens and influencing public opinion on energy and climate issues, and the part individuals can play.

Policy instruments and specific measures will have different consequences for different groups, and this question needs to be addressed. Men and women, for example, often have different lifestyles, climate impacts and energy consumption patterns.

It is also vital that public sector organisations lead by example and seek successful interaction with the business sector, trade unions and voluntary organisations.

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## **Summary**

Municipal, county and regional authorities play an important part in the energy and climate process, and also take major initiatives. There is also a clear political determination to extend such initiatives and to contribute to effective co-operation in this area. Support from central government for municipalities, county councils and regions is a decisive factor in this process, and central government must take its share of responsibility for the infrastructure, documentation, legislation and other policy instruments.

This position paper clarifies the views of the Swedish Association of Local Authorities and Regions (SALAR) on energy and climate policy.

### SALAR's standpoints

In brief, the central government must:

- establish long-term objectives, ground rules and general economic policy instruments.
- support municipalities, county councils and regions in their energy and climate endeavours, and
- include municipalities, county councils and regions in national energy and climate policies.

Municipalities and county councils would like to do the following once the appropriate prerequisites have been established by central government:

- help promote reliable and competitive energy supplies, and
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Municipalities and county councils would like to take the following independent initiatives:

- expand environmentally-friendly energy supplies,
- invest in the efficient use and conservation of energy,
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- stipulate clear energy, environmental and climate requirements in public procurement processes, and
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