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Ecology/Climate

### **Climate change and our tasks**

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The climate change that is underway is not the product of human activity in general but is mainly due to the fact that the capitalist system, guided by considerations of short-term profit and superprofit, has based and continues to base its development not only on the exploitation of labour power but also on the plundering of natural resources, in particular finite and non-renewable reserves of cheap fossil fuels.

In the last decades of the 19th century and at the beginning of the 20th century, coherent proposals for alternative energy systems based on the utilization of solar energy were swept aside by the laws of capitalist profitability or torpedoed under the pressure of the coal companies.

After 1945, in order to perpetuate their superprofits, the oil monopolies and the sectors dependent on oil suppressed many technical alternatives and imposed means of transport, consumption and town and country planning dictated only by the desire to sell an ever-increasing quantity of goods, in particular cars and other mass-produced individual consumer goods.

In the course of the last 40 years, in spite of an accumulation of increasingly convincing evidence, scientists' warnings were ignored by bourgeois governments and the media. On the contrary, they backed up the disinformation campaigns of capitalist lobbies, while at the same time, neoliberal globalization of production and exchanges was leading to explosive growth of greenhouse gas emissions.

Today, at the beginning of the 21st century, the causes of global warming are perfectly documented, the danger is known and recognized by the governments, the technical solutions exist and the gravity of the situation increases with each new report by the experts. But capitalism continues in spite of everything to use mainly fossil fuels, including non conventional sources (heavy oils, bituminous sands and shale) as well as the enormous low-price coal reserves. Since the logic of accumulation constitutes its foundation, the system has launched into productivist gambles which imply dangerous technologies: development of nuclear power, genetic engineering aimed at increasing the harmful production of biofuels, "clean coal" with capture and storage of gigatons of CO2 in deep geological layers. For capital, renewable energy sources are just one new field for the accumulation of value, which explains why their implementation can take particularly destructive forms and comes as a complement to being supplied by fossil fuels, not as a replacement for them.

The only limit to capital is capital itself (Marx). The insane race of this system which accumulates wealth and overconsumption at one pole, poverty and scarcity at the other, threatens to precipitate a human and ecological catastrophe that is irreversible on a historical timescale, with irrevocable damage inflicted on ecosystems, in particular on biodiversity. Whereas the threshold of danger, considerably lower than +2°C compared to the preindustrial era, has already been crossed in many regions (island states, Andean countries, Arctic regions, semi-arid zones...) the plans that have been adopted or are being discussed at the level of the imperialist powers announce a warming between +3.2 and +4.9°C, corresponding to a rise of the sea level of between 60 cm and 2.9 metres at equilibrium (without counting the dislocation of the icecaps). Not only will the Millennium Development Objectives, which are insufficient, not be reached, but in addition hundreds of millions of human beings are exposed to serious degradation of their living conditions. For the poorest among them, their very existence is threatened, due in particular to the risks of coastal flooding, tension over fresh water resources and the expected fall in agricultural productivity in tropical regions.

2. The stabilization of the climate at the least dangerous level possible requires a drastic reduction in the consumption of energy and therefore of material production. At the same time, energy and other resources are necessary to ensure the right to development of the three billion men and women who live in conditions that are unworthy of their humanity and who are the first victims of global warming. The capitalist system is

incapable of taking up these two challenges separately. To take them up simultaneously amounts for it to squaring the circle. Radical anti-capitalist measures are indispensable in order to implement, independently of the costs, a world plan of transition towards an economical and efficient energy system, based exclusively on renewable sources, capable of satisfying the fundamental needs of humanity.

According to the Intergovernmental Panel on Climate Change (IPCC), the stabilization of the climate at the least dangerous level possible requires world emissions of greenhouse gases to peak before 2015 and decrease by 50 to 85 per cent between now and 2050, compared to 2000. In name of the precaution principle, it is essential to adopt as a minimum the most drastic of these objectives. Indeed, climatic models do not incorporate, or do so very imperfectly, the phenomena known as "non-linear", in particular the dislocation of the Greenland and Antarctic icecaps and the release of methane from permanently frozen ground (permafrost). However, these phenomena, already perceptible, are likely to very strongly accelerate climate change and to considerably increase its negative effects in coming decades.

To these physical constraints must be added other constraints, of a social, political and technical nature:

In order to take into account the differentiated historical responsibilities of imperialist countries and other countries, the IPCC estimates that the first must reduce their emissions by between 25 and 40 per cent between now and 2020 and by between 80 and 95 per cent between now and 2050, compared to 1990, while the output curve of the second must drop by from 15 to 30 per cent compared to existing projections, in all regions in 2050 and in the majority of regions (except Africa) from 2020. Here too, the most drastic objectives must be adopted as a minimum, for the reasons indicated above.

Considering their decisive responsibility for global warming, the share of these objectives which concerns the developed nations must be realized by them using domestic measures, i.e. by reductions of their own emissions. These reductions can be replaced neither by purchases of rights to pollute coming from supposedly "clean" investments in the developing countries or those in transition, nor by the planting of trees - which does not offer a structural solution, nor by the protection of existing land and forests – the safeguarding of land and forests, necessary in itself, must not allow the polluters to continue to pollute.

In the name of climate justice and in atonement for their ecological debt, imperialist countries must transfer to the countries dominated by imperialism the knowledge and the technologies that will enable them to develop while respecting the physical constraints of climate stabilization. They must also finance measures of adaptation to that part of climate change that is inevitable, of which the poor populations of poor countries, mainly women, are the main victims.

From the technical point of view, renewable sources make it amply possible to face up to the future needs of humanity. However, because of the need to change the energy system, the success of the transition over the next 40 years is conditional on an important reduction in the consumption of energy (50 per cent and more in the developed countries). This implies in its turn a significant reduction of material production, so that the key question is the following: it is necessary to produce less overall, while answering the legitimate demands of three billion human beings for whom many fundamental needs remain unsatisfied.

It is a total illusion to believe that this range of conditions could be respected by allotting to carbon a price which takes into account the cost of the damage from climate change. Value is a purely quantitative indicator expressing the quantity of abstract human labour put into motion at a given moment by the development of capital: it is by definition incapable of taking account of natural wealth, of taking account of the needs of future generations, of making the difference between useful or useless concrete labour from the human point of view and of taking into consideration the many parameters, both quantitative and qualitative, of climate stabilization. This inability is already

expressed in practice in the fact that the capitalist monopolies are exerting all their weight, successfully, to prevent the bill for global warming from being laid at their door, so that in the final analysis they determine the rhythms and the forms of the policies pursued, according to their own interests. On the social level, finally, the imposition of a world price for carbon would make the workers and the poor pay the bill for global warming, thus aggravating inequalities, between the North and the South but also within the societies of the North and the South.

Capital is unable to resolve the key question because it is structurally incapable of reducing overall material production while producing more for non-solvent needs. To combine the legitimate right to human development and the planned, democratic and rational implementation of a world programme of transition towards an economical and efficient energy system, based exclusively on renewable sources, independently of the cost, is only possible by resorting to radical anti-capitalist measures. These measures include in particular the expropriation of the credit and energy sectors; a massive reduction of working time (towards a half-day of work) with reduction of work rhythms, without loss of wages and with hiring of extra workers; significant taxing of capitalist profits; the greatest extent possible of re-localisation of production, in particular agricultural production, via support for peasant agriculture; public initiatives in the field of housing and transport, essential in order to change modes of consumption; the constitution of a world fund for adaptation, financed from the profits of the monopolies; public refinancing of research, an end to its subordination to industry and the free transfer of clean technologies towards the countries of the South; as well as mechanisms of democratic participation and control by the populations and by local government bodies, at all these different levels.

# 3. The poisoned heritage of two hundred years of capitalist development based on fossil fuels, climate change concentrates the crisis of civilization due to the fact that the potential of this system for social and ecological destruction now outweighs its ability to identify human needs and respond to them. The combination of the economic, climate and food crises in the framework of the capitalist law of population carries within it the threat of a major human catastrophe, and even of a descent into barbarism.

The poisoned heritage of two hundred years of capitalist development, climate change constitutes the clearest demonstration of the global crisis of a system whose potential for social and ecological destruction now outweighs its ability to identify human needs and respond to them. The growth of the productive forces has become the growth of destructive forces, not only because more and more socially and ecologically destructive technologies have been deployed, but also, overall, because capitalist logic, by ruining the climate, is leading humanity towards a whole range of acute difficulties. The capitalist mode of production implies a specific law of population, expressing the permanent need for an "industrial reserve army". In the framework of this law and in the context of the historical exhaustion of late capitalism, the combination of the economic, climate and food crises carries within it the profound threat of a wave of "creative destruction" (Schumpeter) of unprecedented scope, implying not only the massive elimination of material productive forces and irreplaceable natural wealth, but also a major risk of physical destruction for hundreds of millions of human beings. This infernal logic is already at work in the convergence between the fractions of big capital invested in agribusiness, energy, cars and petrochemicals which, by rushing to get their hands on land and on the industrial exploitation of the biomass as an energy resource, are accelerating the ruin of small farmers and the rural exodus, threatening indigenous communities and dramatically increasing the number of sub-proletarians who are victims of chronic famine. For lack of a global alternative, the internal dynamics of the system will push ever more strongly down the slippery slope of a global crisis which could be on a level of brutality and barbarism without any historical precedent.

## 4. Climate change underlines the urgency of both a world socialist alternative and a radical break of the socialist project from productivism. The saturation of the carbon cycle and the exhaustion of non-renewable resources in fact mean that, unlike in the past, the emancipation of the workers is no longer conceivable without simultaneously taking into account the principal natural constraints.

Opposition to capitalist growth, in itself, constitutes neither a project of society nor a strategy for broad social mobilization in favour of another society. The reduction in material production and consumption is immediately

necessary for the stabilization of the climate because capitalism has led humanity too far into a dead end. But that does not in any way prejudge the future possibilities of development, once the climate system has been stabilized, on the one hand, and on the other hand it constitutes only one quantitative criterion of the necessary transition towards an economy without fossil carbon. If we do not want to be led towards antisocial or even reactionary conclusions, this quantitative criterion must be combined with qualitative criteria: in particular, redistribution of wealth, reduction of working time without loss of wages, development of the public sector. If these criteria are satisfied, and on condition that it targets useless or harmful productions, the reduction in material production will actually be synonymous with an increase in the wellbeing, the wealth and the quality of life of the vast majority of humanity, through investments in social sectors, a different kind of town and country planning, free access to vital services and the re-conquest of the free time necessary for self-activity, self-organization and democratic self-management on all levels.

The capitalist system is inseparable from the growth of material production and consumption, but this constitutes an effect, not a cause. It is the production of value, as an abstract form of exchange values, which leads to the permanent tendency to unlimited accumulation of wealth at one pole, and causes at the same time the accumulation of poverty and destitution at the other. A climate policy which did not take into account this double reality would be doomed to failure. The crucial point and the lever of the anti-capitalist alternative thus remain basically those which the socialist project has defined: the mobilization of the exploited and oppressed against a system based on the race for profit, private ownership of the means of production, the production of commodities, competition and the wages system. But this crucial point and this lever are no longer enough to define the alternative. The saturation of the carbon cycle constitutes actually the most obvious and most global demonstration of the fact that, unlike in the past, the emancipation of the stocks of non-renewable resources on a historical scale, the speed of replenishment of renewable resources, the laws of conversion of energy, the conditions of the functioning of ecosystems and biological cycles and their rhythms.

It is not enough to affirm that socialism must take ecological questions on board. The real challenge consists rather of creating the conditions so that the socialist project is compatible with the global ecology of the terrestrial super-ecosystem. Development cannot only be conceived of with the aim of satisfying real democratically determined human needs, but also according to its sustainability by the environment, and by furthermore accepting that the complexity, the unknown factors and the evolutionary character of the biosphere confer on this undertaking a degree of irreducible uncertainty. The concept of "human control over nature" must be abandoned. The only really possible socialism from now on is one that satisfies real human needs (disentangled from commercial alienation), democratically determined by the interested parties themselves, simultaneously taking care to carefully question ourselves as to the environmental impact of these needs and the way in which they are satisfied.

To think in terms of the interpenetration of the social and the ecological implies first of all to go beyond the partitioned, utilitarian and linear vision of nature as the physical platform from which humanity operates, as the store from which it draws the resources that are necessary for the production of its social existence and as the dumping ground where it deposits the waste matter of this activity. In reality, nature is simultaneously the platform, the store, the dumping ground and the whole range of living processes which, thanks to the external supply of solar energy, make matter circulate between these poles, while constantly reorganising it. Waste and the way of disposing of it must therefore be compatible, both in quality and in quality, with the capacities and the rhythms of recycling by the ecosystems, in order not to ruin the proper functioning of the biosphere. However, this proper functioning depends on the number and the diversity of the biological operators, as well as on the quality and complexity of the multiple chains of relations which link them, the balance of flows determining in the final analysis the supplying of humanity with resources.

To think in terms of the interpenetration of the social and the ecological implies secondly to learn the lessons from the reality that a mode of production is not defined only by its relations of production and property but also by its technological structures, which are modelled by its energy choices. Climate change shows this clearly: the energy

sources used by a mode of production and the methods employed to convert energy in order to satisfy human needs (for food, heat, and light) are not socially neutral but have a marked class character. The capitalist energy system is centralized, anarchic, wasteful, inefficient, dead-labour intensive, based on non-renewable sources and characterised by a tendency towards overproduction of commodities. The socialist transformation of society requires its progressive destruction and its replacement by a decentralized system, planned, economical, and efficient, living-labour intensive, based exclusively on renewable sources and directed towards the production of durable practical values, which can be recycled and reused. This transformation does not only concern the "production" of energy in a narrow sense but the entire industrial apparatus, agriculture, transport, leisure and town and country planning. The energy/climate challenge forces us to conceive of the socialist revolution not only as the destruction of the power of the bourgeois state, the creation of a proletarian state which starts to wither away as soon as it is established and progressive phasing-in of self-management by the masses, but also as the beginning of a process of destruction of the old capitalist productive apparatus and its replacement by an alternative apparatus, utilising different energy sources, different technologies and different structures in the service of democratically decided objectives. This extremely profound historical upheaval can start in one country or in a group of countries, but it can only take on its full character and be completed after the victory of the socialist revolution on a world scale, once the abolition of the principal inequalities of development have made it possible to satisfy the basic right of each human being to an existence worthy of the name. It postulates in fact the preliminary realization of energy autonomy, in particular the food autonomy of different countries. Far from being synonymous with the end of human development, it implies an important progress of science and technique as well as of the social power to democratically apply them, with the active participation of everyone, within the framework of a culture of "prudently taking care" of the biosphere, for which the contribution of indigenous communities will be invaluable.

Revolutionary Marxism considers that, once fundamental human needs have been satisfied, the qualitative development of humanity will become more important than the quantitative development. This conception is coherent with that of Marx, for whom real wealth lies in free time, social relations and the comprehension of the world. The perspective of a communism using exclusively renewable energy sources, mainly solar, is situated in the continuity of this non- productivist thought, deepening it and drawing new conclusions in terms of demands, tasks and programme. This deepening justifies the use of the new concept of ecosocialism. Representing the concentrated expression of the common fight against the exploitation of human labour and the destruction of natural resources by capitalism, ecosocialism does not proceed from an idealistic and chimerical vision of the "harmony" that is to be established between humanity and nature, but from the materialist necessity of managing the exchanges of matter between society and the environment, while controlling consciously, collectively and democratically the tension between human needs and the proper functioning of the ecosystems.

### Our tasks

**5.1. Prepare the activists of the social movements so that they can aid the development of the consciousness of the masses and contribute to building a mass mobilization on climate.** The fight for the climate requires in priority the construction of relationships of social forces. Faced with the urgency of the question and with the criminal policies of capitalist governments, we work in all countries for the building of a powerful unitary mass movement, coordinated on a world scale. This movement must be conceived of as a grid of social resistances existing on different terrains, with convergent coordinated actions and periodic pluralist demonstrations, on a common minimal platform. Its goal must be to force governments to aim for at least the most radical reductions in emissions put forward by the IPCC, respecting the principle of "common but differentiated responsibilities" and of social and democratic rights as well as the right of everyone to a human existence worthy of the name. Mass mobilization in defence of the climate is a difficult task, due in particular to the double de-phasing, spatial and temporal, between the phenomenon and its effects. A broad campaign of information on global warming and its impacts is necessary. It must be aimed in particular at the activist nuclei of the various social movements and the political formations of the left, because these nuclei play a decisive role in establishing the concrete link between the

global climate threat and particular social problems, and in deducing from that strategies that make it possible to combine social struggles and the fight for the environment.

5.2. **Build a left current which links the fight for the climate to social justice.** The change that is necessary cannot be obtained without the mobilization and the active participation of the exploited and oppressed who make up the vast majority of the population. Capitalist climate policy makes this participation impossible because it is unacceptable on the social level. This policy in fact implies the reinforcement of imperialist domination and of capitalist competition and violence; therefore of exploitation, oppression, social inequality, competition between workers, violation of rights and private appropriation of resources. In particular, this policy does not provide any answer to the major challenge represented by the jobs, the wages and the social gains of the millions of workers employed in the sectors that emit large quantities of greenhouse gases. So it can only encounter legitimate social resistance. The big environmental NGOs try to radicalize the climatic objectives of governments while refusing to see that this radicalisation involves at the same time the accentuation of antisocial attacks. This is a dead end. We defend the need for a combined fight for the climate and for social justice. Within the broad movement, we work for the constitution of a left pole which links these two dimensions and which argues consistently against proposals based on market instruments, accumulation, neo-colonial domination and technological forward flight. This pole will seek to bring together elements of the trade-union, ecologist, global justice, feminist and third-worldist lefts, the "decreasing" left, the organizations of the radical left, critical scientists, etc.

5.3.Conduct the ideological fight against green neo-Malthusianism, in defence of the poor and of women's rights. By its nature as a global problem and by the extent of the catastrophes which it is likely to cause, global warming favours the development of a whole series of ideological currents which, under cover of radical ecology, try to rehabilitate the theses of Malthus by packaging them in an apocalyptic discourse with strong religious accents. These currents find an echo at the highest level in certain sections of the ruling classes, where the disappearance of a few hundred million human beings is easier to imagine than the disappearance of capitalism. Because of this, they represent a potentially serious threat to the poor, particularly to women. The fight against these currents represents an important task, which our organizations must assume, as such and in liaison with the women's movement. The population level is obviously one parameter of the evolution of the climate, but we have to categorically combat the false idea that population growth is a cause of climate change. The demographic transition is largely underway in the developing countries, and is progressing more quickly than had been envisaged. It is desirable that it continues, but that will be a result of social progress, the development of social security systems, the information that women dispose of and their right to control their own fertility (including the right to abortion in correct conditions). This is obviously a long-term policy. Short of resorting to barbaric methods, no policy of population control makes it possible to respond to climatic urgency.

5.4. **Introduce the question of the climate into the platforms and the struggles of the social movements.** In the perspective of a broad mobilization rooted in existing struggles, we act so that the defence of the climate becomes a major concern of the social movements and that it finds a concrete expression in their platforms of demands, on all terrains. For example:

- the fight for peace: the production and the use of arms constitute an unacceptable folly in relation to climate change... which is itself a possible cause of additional conflicts;

- the fight against poverty, for the right to development and social protection: the ability to adapt to climate change is directly proportional to the level of resources and development. Social inequality increases vulnerability and handicaps energy change;

- the fight of women: adaptation to climate change reinforces the importance and the urgency of the specific demands of women for equal rights, for society to take responsibility for the care and protection of children, against the double working day, for the right to abortion and contraception;

- the fight for employment: to radically reduce the consumption of energy, to reorganise the territory and the cities, to take care of biodiversity, to develop public transport and to substitute renewable sources for fossil fuels offers a gigantic reserve of quality employment;

- the fight for access to land, water and natural resources and for an organic peasant agriculture: rural communities

which practice a labour-intensive organic agriculture know how to increase the organic matter content of land of and to reduce greenhouse gas emissions in agriculture;

- the fight against globalization and the liberalization of agricultural markets: a cause of the ruin of rural populations, famine, rural exodus and/or the plundering of ecosystems, the liberalization of these markets is also a major source of emissions, direct (transport of products for export) and indirect;

- the fight for the right of asylum: faced with the increase in the number of environmental, and in particular climatic, refugees, freedom of circulation is essential and constitutes the only response worthy of humanity;

- the fight of indigenous communities for their rights: by their knowledge and their mode of exploitation of ecosystems, in particular forests, these communities are the most capable of preserving and developing carbon sinks;

- the fight against the flexibility and the precarisation of work, against the lengthening of working time: work schedules that are cut and made flexible and capitalist campaigns in favour of the increased mobility of the labour force workers to use cars. "Just in time" production is a major source of emissions of greenhouse gases in the transport sector. The reduction of working time is a necessary condition for the development on a mass scale of alternative patterns of consumption and leisure;

- the fight against privatizations, for a public sector of quality in the fields of transport, energy and water. Only a free public transport sector of quality can reconcile the right of everyone to mobility and the reduction of emissions. The liberalization of electrical production complicates the introduction into the network of intermittent renewable sources. Only a public enterprise not working for profit can take up the challenge that consists of suppressing within two or three decades the totality of emissions in the housing sector.

5.5. Make demands on the climate an axis of the trade-union left, in the perspective of an anti-capitalist struggle going beyond the redistribution of wealth. The leaderships of the big international trade-union confederations accompany capitalist climatic policies in exchange for the possibility of them negotiating certain of their modalities. This orientation is concretized in the proposal of a "Green Deal" based on the illusion that green technologies will make it possible to absorb unemployment and give the impulse to a new long wave of prosperity and capitalist expansion. The trade-union bureaucracies accept the requirements of productivism and capitalist profitability as well as the instruments of the dominant climate policy: government aid to "green" companies, "ecological taxation", Clean Development Mechanism, the market in emission rights, even support for nuclear energy and biofuels. This policy is likely to make the trade union movement co-responsible for catastrophes. It sows division among workers on an international level, and between sectors within the different countries. Considering the importance of the climatic and energy challenge, it is decisive for the trade-union left to make it an element of its fight for a change of course. This combat is difficult because it does not involve "economic revival" but the reduction of energy consumption, the suppression of productions that are useless or harmful, the reconversion of workers in these sectors, etc. There are considerable obstacles to this combat, due to the way workers are tied to the capitalist mode of production, on which they depend for their daily existence. To take up the challenge, the trade-union left must get away from a cramped vision centred on the redistribution of wealth, in order to contest the very conception of wealth and the way in which wealth is produced, i.e. the very foundations of the mode of production. This approach raises the importance of demands such as the reduction of working time (with a lowering of work rhythms, without loss of wages and with proportional hiring of new workers), the extension of the public sector, free access to basic services and workers' control (over work rhythms, production, energy, etc.)

## 5.6. The massive transfer of clean technologies towards the countries dominated by imperialism and the financing of adaptation to the effects of climate change in these countries require a sharing of assets and knowledge on a world scale, therefore substantial taxation of capitalist profits. The rescue of the climate requires a sharing of assets and knowledge on a world scale. It must thus be related to:

- the cancellation of the debt of the third world and restitution to the people of the assets that the dictators of countries of the South have placed in Western banks;

lifting of bank secrecy, suppression of tax havens, taxing of inheritances, a tax on speculative movements, etc;
 a substantial increase in the budgets of the imperialist countries that are allocated to government aid to development;

- the creation, in addition to this aid, of a single world fund for the adaptation of the developing countries to the inevitable effects of climate change and for the transfer of clean technologies towards the public sector of these countries, without financial conditions;

the resources for this fund should come from taxing the profits and the excessive superprofits of the economic sectors most responsible for climate change (in particular the oil sector, coal, cars and electrical production);
suppression of the system of patents in health and in technologies that make it possible to produce essential consumer goods and services (transport, light industry, water and energy, communications) so that all the populations of the planet can have access to basic goods;

- a system of financial compensation for the countries of the South which give up exploiting their fossil fuel resources.

5.7. The emissions of the countries dominated by imperialism will not be able to diminish by at least 30 per cent compared to projections unless the capitalist model of development is called into question. The contribution of the countries dominated by imperialism to the stabilization of the climate at the least dangerous level possible can only be achieved by an endogenous development, responding to the needs of the great mass of the population, therefore linked to land reform in favour of peasant agriculture and to a reorientation of production towards the domestic market. To reconcile the right to human development with the stabilization of the climate thus requires taking measures against the local ruling classes, who use the right to development as a pretext to try and refuse any obstacle to the burning of fossil fuels, who plunder natural resources, appropriate the forests for themselves, act as intermediaries for the sale of carbon credits, produce biofuels and export agricultural food products or industrial products at low prices for the markets of the developed countries. To prevent them being used to fuel this socially and ecologically harmful model, the funds and the technological means that are placed at the disposal of the countries of the South must be placed under the democratic control of the populations and their social movements.

5.8. Oppose technological forward flight and incorporate all the great ecological challenges into a really sustainable perspective of development. The history of capitalism is littered with environmental crises that were "solved" without a global ecological vision, by the implementation of partial technological answers subordinated to the demands of profitability, whose harmful environmental effects appeared later. To solve the climate/energy crisis while following this same method of the sorcerer's apprentice is likely to have even more dangerous consequences, in particular in three fields: the increased recourse to nuclear power and genetically modified organisms and the geological storage of CO2 in the framework of a new wave of exploitation of coal. To oppose these capitalist responses is one of the most important tasks. They should be denounced as symbols of the madness of unbridled capitalist growth, as the absurd attempt of the system to jump over its own head in order to maintain in spite of everything the accumulation that generates profit. In a more general way, the climatic challenge brings together all the environmental questions. The response must thus integrate all the great ecological challenges, in particular: (i) the defence of the tropical forest, respecting the rights of the indigenous communities which live off its resources (carbon sinks); (ii) the defence of biodiversity; (iii) rational and public management of water resources; (iv) the fight against the poisoning of the biosphere by the several hundred thousand molecules resulting from petrochemicals, which do not exist in nature and thus in some cases cannot be broken up by its reducing agents; (v) the elimination of the gases that destroy stratospheric ozone and their replacement by compounds which do not have other dangerous ecological impacts; (vi) the fight against atmospheric pollution and its consequences for human health (asthma, cardiovascular diseases,) and for the ecosystems (acidification, tropospheric ozone).

5.9. Denounce the gulf between the capitalist plans and the diagnosis of the situation by scientists. Establish links with critical scientists. Pose the questions of intellectual property rights and the social role of research. The claim by governments which are trying to make us believe that their capitalist and liberal climate policies are founded on "science" must be fought vigorously. To do this, we must denounce the gulf that separates the objectives of governments from the conclusions that the precaution principle makes it necessary to draw from the reports of the IPCC. This denunciation implies assimilating the essence of the scientific expertise while criticizing the dominant ideological and social presuppositions which are conveyed by a large majority of the experts. The left must establish

relations with scientists, invite them to communicate their expertise to the social movements, challenge them on their general political positions, on the basis of their own scientific expertise, push them to speak out on the contradiction between the global rational solutions which the fight against global warming requires, on the one hand, and on the other hand the extreme compartmentalisation of science in the service of partial capitalist rationality. Considering the place occupied by scientific expertise in the development of policies, it is of considerable importance to establish relations between the social movements and critical and humanistic researchers. Within this framework, we develop a more general point of view on the role of science and research in the fight for the stabilization of the climate in a framework of social justice. We do not refuse technological solutions, nor the concepts of development and progress. We argue on the contrary for scientific research and technique to be freed from the influence of capital so that their potential can be placed massively and quickly at the service of progress in energy efficiency, rational management of research, an end to the contracts which tie universities to industry and to finance capital, the democratic definition of research priorities in the context of the transition, in a framework of social justice, towards a society without fossil fuels.

5.10. Fight against the attempts to make individuals feel guilty, but assert the need for energy sobriety as far as socially possible. The discourses of governments aimed at making people feel guilty, which place responsibility for global warming on the behaviour of individuals, seek to conjure away social inequality, to hide the responsibility of capitalism, seek to divert attention from the profound structural changes that are necessary and pave the way for unjust measures such as the "carbon tax". It is an illusion to believe that the climate could be saved by a movement of "cultural contagion" against overconsumption, whereas more than half of humanity lives in a situation of chronic underconsumption. But it is also an illusion to gamble on hypothetical revolutionary scientific breakthroughs in order not to put in question individual overconsumption and practices which result from it. Instead of counterposing actions in the sphere of consumption to structural changes in the sphere of production, the first must be conceived of as a means of making people aware of the need for the second. Alternative social practices, democratic campaigns and mobilizations, even those which only involve a minority, which contest productivism and consumerism, can also play a positive role in the formation of the collective consciousness that structural changes are necessary, in the sphere of production, and that these changes will be accompanied by a higher quality of life.

5.11. **Develop a practice of popular aid in the event of a catastrophe.** Climate change considerably increases the risks of catastrophes, affecting more particularly the workers and the poor, in particular in the developing countries. In the face of this threat, we must prepare to intervene with the social movements on two different terrains: the terrain of demands, consisting of placing states and governments before their responsibilities; and the terrain of direct, popular and interdependent aid, taken in charge by the local populations and their organizations with the assistance of networks of activists on a world level. The experience gained in natural disasters shows in fact that these popular aid initiatives are faster, more directly directed towards the poor and their real needs and are less expensive. Moreover, they favour the development of a different kind of social relations and of contestation of the established order.

(version 10/11/2009)