

Changing priorities on ‘climate action’ and energy policy in Europe as they have emerged during 2014

A strategic assessment

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SUMMARY

Overview

1. 2014 was a time of unusual and comprehensive flux in European affairs. It saw the abrupt end of the post-soviet era 1991-2014. It therefore concluded the period since 1989, and especially since the late 1990s, when all current European 'climate action' policies were conceived and formed. We are in a different age now. The evidence today is that much is now different both from what was the case in January 2014 and from what official statements are still saying. ***Nothing in the period 1989-2014 should be assumed to predict either in general or in detail what will happen in 2015 onwards.*** This means that the Paris 2015 UNFCCC meeting will occur in circumstances and under public and political priorities that are quite different from those which the moving circus of its professional governmental and NGO activist participants assume, as the failure to find a workable consensus at the Lima COP20, already showed.
2. This flux arose in part from domestic political changes. Prominent was arrival of a new President of the European Commission. Mr Juncker was appointed in a new way by interposition of the European Parliament: it superceded the powers of the nations. A radical change from previous priorities and procedures has occurred with the Juncker Commission. It remains to be seen if Mr Juncker will be removed from his new office because of allegedly corrupt practices in Luxembourg while he was Prime Minister; but the direction of his Commission is increasingly clear and may continue even without him.
3. Volatility occurred also because of global events. Some are the result of past errors by Europeans but now beyond their direct control; some are fall-out from the bitter civil wars fracturing the Muslim 'umma. Respectively, these relate to Russia's return to open hostility following the annexation of Crimea on 21 March and to naked contests of force in energy geo-politics as a result of Saudi action from September to squeeze higher cost oil producers (Iran and Russia in that order) and to protect OPEC market share by depressing the oil price. By the end of December, oil prices had halved and have dipped to below \$60 bbl. This is the eighth slump in oil price of more than 30% in the last thirty years. The 'peak oil' rhetoric favoured by many 'green' organisations is deflated. Other contextual international events are a consequence of European decisions. Above all these relate to the rolling and deepening crisis of the single European currency. The Greek election result in January 2015 returning a strong anti-

austerity government opens what many expect to be the beginning of the end-game for the single currency. The Euro weakens still.

4. Facing 2015, Germany, Spain, France and the UK are the pivotal European states on climate and energy issues, each for different reasons; and there are uncertainties about how events will unfold in each. But in two other groups of states - in Scandinavia and the eastern rim - matters seem more predictable. The report identifies underlying trends and discusses forthcoming potential trigger-points to provide a secure foundation for assessing future events.

In a little more detail...

5. There are two background special factors that make assessment of EU politics complicated: the imbalance between its ambition and its power and the refusal to recognise openly the consistent record of failure in the declared objectives of EU 'climate action' policy to deliver the predicted results. These explain the deeper reasons why success is inherently unlikely in the future even if the policies were applied as intended, which they were not and are not.

6. The evidence supporting that judgement is in the three centre-pieces of EU 'climate action' policy of the last two decades each of which is reviewed in detail: attempts at carbon trading have failed; 'green growth' promised and predicted has failed to materialise – and these two policies have contradicted each other – and the series of declared 'climate action' policies (20:20:20; 2030) have been subtly changing in unacknowledged concession of failure. Notably, the ambition to impose 'binding legislation' on sovereign nations has been quietly side-lined in the 2030 'climate action' policy adopted in October 2014.

7. It is broadly a copy of the NAMA tactic that has been followed in the UNFCCC conferences since the Durban COP and it is already plain that NAMA (now called INDT) will be the strategy for Paris following the predictable failure of the Lima COP20 to change the established pattern of these conferences ("deadlock"; extra time; "breakthrough"; toothless 'Saviour Document')

8. However, the return of open hostility in relations with the Russian Federation and with its autocratic president in particular, and the Saudi reprise of the September 1985 tactic to regain control of world oil markets have catapulted energy security issues to the top of the EU and national European agenda.

9. The decisive Republican victories in the mid-term elections of November have consigned President Obama to 'lame duck' status. Lacking democratic mandate via Congress will further impede his attempts to force domestic 'climate action' by executive order. As he strives to secure some sort of legacy from his presidency, his inept concessions to China – which conceded nothing of importance whereas Obama promised much – followed by his reckless speech in Brisbane on 14 November, insulting the Australian Government at the time of the G-20, has further weakened his international standing and commensurately strengthened that of China and India (as became plain at the Lima COP20) as well as further stiffening Congressional opposition to his initiatives, including his recent priority to international 'climate action' matters. Obama's Australian speech also poses Japan with difficult choices about friends at a time when its own renewables policies, notably extravagant FIT for solar, is in turmoil, its thermal coal and LPG imports rising and its economy falling back into recession.

10. Closely related because of its world-wide ramifications is the on-going energy-geopolitical civil war between Muslims in the Middle East. Saudi Arabia, supported quietly by Egypt, Jordan (and Israel), are on the one side. A motley combination of Islamists stands on the other. There is Iran (running Hezbollah and, with help from Putin, Assad). There is the Muslim Brotherhood and allies (Qatar, Turkey, Hamas). There are the Da'esh (ISIL) and Al Qaeda (sometimes fighting each other, sometimes not). At the moment, the Iranian pursuit of the nuclear weapon is the epicentre of danger to the whole post 1945 world order as well as the region. But intellectually weak geo-political analysis in Washington and Europe means that the fact that (for the moment), the Iranians also fight our enemies, the Da'esh, makes them seem to be our friends. This has given credence to a P5+1 process which looks likely to produce the worst outcome, namely a leaky and vague diplomatic instrument that cannot prevent breakout. If that happens, all bets for global security are off – which is another subject.

11. In light of all the above, how should we interpret the radical moves by the incoming Juncker Commission? It is plain on the face of the facts that the new Commission has returned to more traditional priorities. The escalating Eurozone crisis, the renewed Cold War with Russia and European energy security are the top priorities. 'Climate action' has been swiftly relegated to a low priority despite any statements or appearances to the contrary. Ms Connie Hedegaard and the 'Climate Action' DG have disappeared. On the record of

actions, ‘Climate Action’ is very much the junior issue in Commissioner Miguel Arias Cañete’s portfolio. The concerted ‘Green’ opposition to his appointment was simply swept aside.

12. The current international scene is so full of tensions and contradictions that no firm predictions about what may happen in particular countries can be made except the likelihood that formally declared policies are not likely to translate into what they intend. The report therefore responds to the nature of events by offering a deeper sort of analysis. It highlights the forces that are important in assessing national directions in three groups of European states. Particular attention is paid to various national positions on nuclear power in the energy mix.

13. Paradoxically, the more reliable political and business opportunities to advance the agenda of innovating clean and affordable energy for all (as spelled out in *The Vital Spark* in 2013) probably lie outside the countries which have been core enthusiasts for ‘climate action’ in the past and they do not lie in revolutionary but in evolutionary energy technologies, and not in a principal preoccupation with decarbonisation.

13. Emerging difficulties in the German economy as a result of its *energiewende* policies; the implications of the hollowing out of Spanish democracy – accelerated by the Syriza victory in Greece; increasingly firm resistance to EU ‘climate action’ and energy policies in Poland; the consistent priority of geo-political over ‘climate action’ priorities in the Czech Republic and Slovakia; crisis in the British energy market at a time of historic uncertainty in British politics and problems in the previously stable environment of the French nuclear industry at a time of crisis in French politics are particular points to note.

14. The report is silent on recent developments in Japan but was written on the assumption that Prime Minister Abe was likely to obtain a renewed mandate in the snap election in December (as in fact occurred) and that, broadly as has happened in Europe, Japan’s return to recession will probably reduce the political appetite for gesture ‘climate action’ policies and increase the interest in reliable if less flamboyant practical export opportunities as well as restoration of least-cost energy and energy security of supply. The firm response of some Japanese power companies by refusing to destabilise their grids with uncontrolled subsidy-driven solar electricity surges and METI’s reported resistance to German levels of deployment subsidy via feed-in tariff

which have exacerbated this additional energy problem for Japan, supports that view.

15. Key findings

- Structural and policy priorities have been radically changed at the EU.
- Russia, Russian challenge to the European security order, energy security and the Eurozone crisis are the top issues
- ‘Climate action’ has been rapidly demoted to a low priority
- The 2030 EU ‘Climate Action’ plan was adopted but is unenforceable
- The fall in oil and gas prices has destroyed the business cases based on ‘Peak Oil’ assumptions for much unconventional energy investment. It undermines many national energy plans in Europe (eg the UK DECC; the Scottish Nationalists; the German *energiewende* above all).
- Subsidy and system management costs for uncontrollable generators (wind and solar) are rocketing and face consumer price backlash in UK
- But Germany is the key pivot state in the 2014-15 European crisis although there is more uncertainty about political dynamics in core enthusiast states than in the Scandinavian and eastern European periphery
- The *energiewende* experiment is poisoning the German economy but will continue. Germans probably have the highest public tolerance for cost
- The Eurozone crisis, and social stress in southern Europe, will probably dominate European politics in early 2015. A hollowing out of democracy is occurring across Europe, North and South, with profound implications
- The need for security of supply will continue to trump ‘climate action’ in eastern Europe. Poland and the Czech Republic led the successful neutering of the EU 2030 ‘climate action’ policy in October.
- The influence of Denmark and of environmental NGOs on EU affairs waned in 2014 and does not look likely to revive to 2000s levels. To their very public fury, the structural changes in EU procedures have locked environmental NGOs out of their previously privileged access to policy-shaping.

TWO SPECIAL FEATURES OF THE EU

The autumn and early winter of 2014 was a time of great and unusual flux in European affairs. To understand reliably what is happening in any given member state, it necessary first to understand the EU's stated policies on climate change and their consequent impact on the production and use of energy within the Union. Individual countries must be viewed and interpreted within that volatile context. An accurate assessment of what may actually *happen*, as distinct from what the policies *say*, is then possible. They are not the same thing.

In politics there is always a gap between words and actions. History shows that this is especially so in the EU institutions, simply because there is such a great structural mismatch between its stated ambitions and the actual powers that it can deploy.

While that is frustrating to declared federalists like the Vice President of the previous Barosso Commission, Viviane Reding of Luxembourg, who impatiently calls for abolition of the sovereignty of EU states, it is a consequence of the Monnet Method of building a United States of Europe (USE) by stealth, never – or rarely – knowingly declaring the real intention, given that the project of federation commands minority support in the relevant electorates.¹

That is evident in the fact that from its creation in 1979 until 2014 the percentage of citizens choosing to vote for the European Parliament fell election by election and has been under 50% since 1999. It only rose in 2014 to elect large numbers of members from parties that wish to dismantle the EU in its present form. Often overlooked, this helps to explain why the EU has such weak democratic legitimacy to push through any of its policies. It also helps to explain why it reflexively prefers autocratic and administrative modes of policy-making. This also is to be seen in the insistence that Union and international

¹ The 'Monnet Approach' is best read at source: Arthur Salter, *The United States of Europe; and Other Papers*, George, Allen & Unwin, London, 1933; Ms Reding's view is that the Commission should become the Executive, the EU Parliament the Lower House and that the EU Council where currently the leaders of the sovereign member-states meet, should become the Senate of the new United States of Europe.

law should over-rule national sovereignty, because only if this principle is accepted can sovereign state power be curbed.

The conflict is to be seen in the different interpretations of the concept of 'subsidiarity' to be found in national capitals and in Brussels. National capitals – notably London – interpret 'subsidiarity' to mean that decisions are to be taken at the level closest to their effect upon people. Power only rises from local to national to Union level where required. The Brussels interpretation is precisely the reverse. It has always been that 'subsidiarity' means that all decisions are taken at Union level unless the Union level decides to permit them to be made at national or local levels.

In this circumstance of high but unspoken ambition and low effective executive power, there is an understandable tendency for EU officials to assert that the words *are* the actions. There has been a constant tendency in Brussels to equate speaking with doing. Simply because something has been said or written in a policy document, it is believed that something has happened: the wish is confused with the action wished for. Here again, if not borne in mind, observers who read policy literally can be easily misled.

In recent years frustration in Brussels has increased with the stubborn refusal of the real world economy (which includes real world electors and consumers in democracies) to conform to EU Plans, most seriously for the Single Currency, whose plight outweighs that of all other issues for the EU at this time, but not least in the area of climate and energy policy.

The frustration is to be seen, for example, in the inability of renewable energy to progress spontaneously in the fuel mix². "Spontaneity" is a pivotal and mandatory requirement for success in any energy transition. "Spontaneously" means actions taken without the need for tempting bribes in the form of deployment subsidies paid from hidden and inescapable extra costs loaded onto consumers' energy bills. This device is attractive to politicians because their fingerprints are not directly on the tax; but it is therefore doubly

² In truth this should be no surprise as just indicated. The historical record of energy transitions is clear enough: only very high density, physically concentrated, dispatchable energy sources (oil in the Middle East or nuclear in Japan, for example) have ever achieved the speed of adoption now prescribed for low density, widely distributed and intermittent 'renewable' sources which, above very low levels of market penetration, demand such massive infrastructure investment from high-grade and depleting resources mobilized by high-grade, fossil fuel derived energy- that it casts doubt on the strict correctness of the adjective 'renewable'. Qv V. Smil, *Energy Transitions: History, Requirements, Prospects*, Praeger, 2010, *passim*, but esp. Ch 4

regressive in economic impact, and also instrumental in stimulating consumer anger when it is revealed.³

Also frustrating for the EU nexus of bureaucrats, politicians and lobbyists inside the 'Brussels Bubble' has been the evidence which has accumulated over the last decade that the carbon intensity of Europe is not reducing as a consequence of the application of EU climate policy. Only recession and non-growth, much assisted by the rolling failure of the single currency project now verging on a Japanese-style lost decade of deflation, have done this.

As irritating for them is the fact that the USA, under the Bush presidency a truculent non-signer of the Kyoto Protocol suite of top-down targets and timetables policies that were at that time championed by the EU in the peak years of climate catastrophism during the last decade, has been reducing carbon intensity by switching swiftly to cheap shale gas and building modern industrial capacity. Of course it is possible on current trends that in his bitter confrontation with a rampant Republican Congress the 'lame duck' President Obama may in fact achieve a legacy after all before leaving office, in the form of blunting that organic American growth by his un-American addiction to high taxes and burdensome executive regulations.

However the basic fact that US carbon intensity has fallen faster than carbon intensity in the EU is also a strong indication that the EU policies may be misconceived - if reduction of carbon intensity is indeed their aim. The degree of failure may be veiled to some extent by the fact that shale gas exploration within the EU is being inhibited by intrusive levels of regulation. This, of course, helps to make it a self-fulfilling prophecy that there are limited prospects for shale gas in Europe.

But the lesson that is being drawn from failure is not that there are defects in EU policy. As the set-back has become clearer, the response has been similar to that in the Kyoto Protocol era of the UNFCCC.⁴ It is to call in stronger tones,

³ qv for more discussion of 'stealth' taxes, M. Sinclair, *Let them eat Carbon: The price of failing climate change policies and how government and big business profit from them*, Backbite, London, 2012.

⁴ G. Prins & S. Rayner, "Time to ditch Kyoto", *Nature*, vol 499, 25 October 2007, pp 973-5, republished in (eds) S. Rayner & M. Caine, *The Hartwell Approach to Climate Policy*, Routledge, August 2014, pp 221-26. The Lima COP20 failed in exactly the same way. The only occasion when a COP has been significantly different was the Durban COP17 in November 2011. This was due to the Japanese *coup de main* announcing refusal to subscribe to a Kyoto successor regime, which jolted the proceedings into recognition that the top down targets and timetables approach was fatally flawed. See also footnote 5 for the Korhola reference and comment.

which have a troubling historical resonance with the rhetoric of authoritarian rulers in planned economics, for even more stringent pursuit of the failed policies: for the Triumph of the Will over recalcitrant economic facts as used to happen in Command economies: for there to be higher targets in the next Five Year Plan for tractor production as the response to the complete failure to build tractors in the one just ended. Or it has been until now. In September 2014, signs of a major change in EU priorities appeared and were confirmed when the Juncker Commission was confirmed in power and the October 2014 EU Council meeting took place.

What is actually going on? To explore that let us first establish the historical context of EU behaviour. We shall examine the declared major public policy initiatives since 2006, and see what has happened to them since then. Thereafter a review of the early days of the Juncker Commission and its approach to climate and energy issues, as it may be deduced from actions, will be given. It is situated against a brief review of some salient aspects of the international and geo-political context within which these apparent changes in priority are occurring, in order to understand why climate policy seems to be being so sharply relegated. This will permit foreign parties to make a more informed judgement in deciding what weight to place on which aspects of Brussels' words and actions: and on those of European states.

THREE CENTREPIECES OF EU 'CLIMATE ACTION' AND ENERGY POLICY

For a period of a few years as part of its constant ambition to centralize powers and to boost its popularity, EU policy was to burnish the Union's claim for leading status as a "progressive" force on the world stage by presenting itself as world leader on dramatic, eye-catching and (it was hoped by Brussels) crowd-pleasing 'climate action' policies. The high point of this effort was in 2006-09.

The three centrepieces were, respectively, the 20:20 (later 20:20:20, now 2030) policy, the promise of 'green growth' (of which the 2009 EmployRES study was a predictive study) and the creation of a carbon market – the Emissions Trading Scheme (ETS). 'Green growth' was supposed to be the carrot. ETS and the Perfect Vision policies (see explanation below), the stick.

THE EU CARBON TRADING SCHEME – A BROKEN STICK

The carbon market has never achieved sustained take-off, crashing repeatedly. From a high of 32 euro, in 2008 permit prices fell from 25 to 5 euros. It slumped again to its lowest level of 2.81 euro in January 2013. Currently it claims to be flying; but its volatile nature suggests that caution is in order because it only flies on constant life support and in the face of market forces.

In theory emissions trading is an ingenious idea; and there have been some successful applications when applied locally to 'tame' problems, such as pesticides in the USA. But in practice the EU ETS has never had a chance to prove itself.

It is an artificial market because its main animator is political manipulation. Evidence for this is that the January 2013 slump was above all an instant response not to any real world factor but to a European Parliament vote to resist a Commission attempt to rig the market.⁵

As constructed, of course it does provide juicy rent-seeking opportunities for lobbyists, brokers, 'green' energy boosters and a chorus of ancillary arms-length tax-funded entities such as The Carbon Trust. Such behaviour is quite normal. It is just what Charles Mackay predicted in 1841 in a famous study of the Dutch Tulip Mania, the South Sea Bubble and the Mississippi Project – all earlier examples of bubble markets.⁶

ETS is a mess. But at least it is technologically neutral. However, it never had a chance to succeed since the 2009 Renewable Energy Directive tied the market's hands in finding low carbon energy. These two EU flagship policies contradict each other. The market is distorted by excessive national renewables subsidies.

⁵ The market price of CO₂ was very low, due to the recession and to the Renewable Energy obligation. There was a large surplus of 'tradeable permits' lying on the market. To try to increase their value, the Commission sought to use its power as in effect a central bank for this strange currency, by 'backloading': that is by withdrawing half the permits from the market. The EPP majority group in the European Parliament, guided by Finnish MEP Eija-Riita Korhola, decided not to support this intervention and the January 2013 slump was reaction to their success in the ITRE Committee. This was challenged in the Environment Committee, and reversed the following month. But then it was reversed again back to the EPP original position in the Parliament in April. All forms of external lobbying was then deployed by the Commission and the environmental NGOs – including the Prince of Wales, Catholic Bishops and others - to reverse that reversal and to cut the over-supply of permits, which was successful. But the troubled ETS has only flown falteringly since because the market knows to what degree it is hostage to such effects; and it remains a victim of contradictory policies. I am indebted to Dr Korhola for this account which is fully rehearsed in her analysis of EU climate politics, informed by her unique perspective as a central actor in the EU and UNFCCC COP processes, in her PhD: "The rise and fall of the Kyoto protocol: climate change as a political process" Faculty of Biological and Environmental Sciences, University of Helsinki, November 2014.

⁶ C Mackay, *Extraordinary Popular delusions and the Madness of Crowds*, Richard Bentley Publishers, London, 1841

It is not well understood that the RED cuts right across the ETS and is part of the reason that it has failed. Few people realise that the renewables targets do not add any saving to that guaranteed by the ETS, since it is a cap as well as a guarantee. RED only adds costs (i.e forces the market to adopt an expensive way of saving emissions as opposed to a less expensive one).

Outside the circle of its promoters, there is no longer expectation that the EU model will be copied world-wide. The show-down over the EU's attempt to impose carbon permits on airlines in 2011-12 (when it was forced to retreat or accept grave damage to Europe's air transport industry and links) was perhaps the defining moment.⁷ The blocking of the Obama Presidency by the November 2014 mid-term elections will ensure that the California carbon market experiment will not prosper more widely, either. By early December it had become clear that the incoming Congress will use a portfolio funding bill approach to block, for example, any of the President's 'climate action' funding promises at the Lima COP20.⁸ Conversely, in the early New Year Obama threatened to veto the Keystone XL pipeline bill now passed by both Houses who nevertheless lack sufficient votes to overturn a Presidential veto: so it is stalemate.

The carbon price issue has now returned to national decision. Some have decided to act unilaterally. The UK's introduction of a Carbon Price Floor that is above the current EU price is having a dampening effect on UK competitiveness just at a time when it has begun to improve at a faster rate than anywhere else in Europe. The CPF also discourages new investment in gas capacity because it has dampened any incentive for new investment in the power sector. This materially increases the risk of power black-outs (now estimated to be between a 12-25% probability). This comes in combination with the EU Large Combustion Plant Directive which will close five coal fired power stations in Britain 2013-15. With unrelated failures in two nuclear base-load stations and a serious fire at one of the major gas-fired base-load stations (Didcot), the National Grid therefore predicts a precarious supply safety margin of 2% for the 2014-15 winter. The British Government has sanctioned extraordinary measures to try to avert the politically suicidal possibility of the

⁷ The forced retreat of the Commission on its ambitions to be a global leader over the aviation emissions issue is described and analysed in Korhola, "The rise and fall of the Kyoto Protocol." Ch 8, PhD University of Helsinki November 2014

⁸ R.Darwell, "Obama puts climate on the 2016 ballot", *Wall St Journal*, 2 December 2014. <http://www.wsj.com/articles/rupert-darwall-obama-puts-climate-on-the-2016-ballot-1417478450>

lights going out by allowing lucrative payments to re-activate moth-balled oil and gas stations and to retain coal stations in the mix. However, the failure to reactivate one of the larger moth-balled stations (at Peterhead in Scotland) means that the winter safety margin remains precarious.

Belgium was also looking at a tricky winter because of nuclear station faults. None of this takes account of the continuing possibility of gas blackmail by Mr Putin. Austria had already signalled in mid September the first significant drops in delivered Russian gas as against ordered quantities. The Baltics are in Putin's cross-wires and vulnerable to energy blackmail. The wider context of gas and oil geo-politics will be given below.

Meanwhile the EU 2030 plan fosters an ambition to try yet again to support the artificial market of the ETS by proposing a "market stability reserve" buffer fund to be in place for the next ETS trading cycle from 2021. That requires both money and political will. It is not clear that either will be forthcoming.

THE EU 'GREEN ECONOMY' – A CONSTANTLY RECEDING CARROT

A constantly asserted and repeated claim is that the policy-driven switch to low-density, intermittent fuels will stimulate a 'green economy' in the EU. The claim was famously asserted in the 2006 'Stern report' at the apogee of 'climate action' politics. The report was published to great media and political acclamation and to immediate academic dissection and dismissal from which it has never recovered.⁹

In 2009 the EmployRES study, commissioned by the EU, published very detailed predictions of the job-creating potentials of 'green' energy which were found to be positive for nearly all EU countries, the UK being an interesting exception, showing positive gain under only one of the seven scenarios.

Claiming to be the first comprehensive macro-economic study of the employment effects of renewable energy deployment in the EU, it concluded, with high confidence, that "...the current high economic benefits of the RES sector can be increased in the future... if support policies are improved to stimulate innovative technologies appropriately (*sic*)..."¹⁰ EmployRES scenarios

⁹ W.D. Nordhaus, "A Review of the Stern Review on the Economics of Climate Change," *Journal of Economic Literature* Vol. XLV (September 2007), pp. 686-702

¹⁰ *EmployRES: The impact of renewable energy policy on economic growth and employment in the European Union*, p.195.
http://ec.europa.eu/energy/renewables/studies/doc/renewables/2009_employ_res_report.pdf

assumed that the EU would benefit from major export possibilities. As things have turned out, this has proven to be flawed.

However, assuming this hypothetical global export market, significant high-points were predicted for Germany on the further assumption that the German solar industry would retain world market dominance. Spain was also predicted to have solid employment gains. Yet the German solar industry has been undercut by the Chinese (as evident in the bankruptcy of Q-Cells in April 2012 – then to be bought out in a fire-sale by Chinese money). The reduction of German feed-in tariff subsidies was an important ingredient of the collapse, underlining the artificial nature of a market that cannot live without such subsidy support.

The collapse of the Spanish renewable energy market after Prime Minister Rajoy's government shut off the subsidy regime in January 2012 was even more dramatic and is particularly relevant to assessing the present moment. The share price of wind-turbine manufacturer Gamesa crumbled as did that of T-Solar Global, the solar park operator. Companies that had grown quickly big on the \$69bn subsidy-fed renewable boom in Spain since 2004 were now shut out of their domestic markets.¹¹ "They destroyed the Spanish market overnight with the moratorium," European Wind Energy Association Chief Executive Officer Christian Kjaer said in an interview. But his mind was on contagion. "The wider implication of this is that if Spanish politicians can do that, probably most European politicians can do that."

The priority for the Rajoy government lay in the ruined public finances and soaring youth unemployment that it inherited. It had to prioritise its public spending ruthlessly. Deployment subsidies for renewable energy lost out to other more traditional demands. Mr Kjaer was right to worry for the safety of his special interest group. The lesson is to be recalled as Europe at large – and especially Germany – faces simultaneous and interwoven crises for 2015.

The bullish predictions for the job-creating potentials of the policy-driven adoption of renewable energy generation and of energy-saving devices in EmployRES have been quietly sidelined.¹² The survey has never been repeated, as it was expected that it would be.

¹¹ <http://www.bloomberg.com/news/2012-05-29/spain-ejects-clean-power-industry-with-europe-precedent-energy.html>

¹² The clearest presentation of the ambitions of EmployRES, which shows how far from the realities of 2014 those 2009 aspirations for Europe leading the world's 'green' economic

However, the postulate lives on that renewable energy investments will be good business simply because one attaches a moral importance to doing it. It is to be found in the latest blue chip panel to claim that the proposed policy and price rise driven energy transition will be either costless or profitable in current timescales. Professor Nicholas Stern muddled the wish with the act in his eccentric assumption of a zero discount rate in the 2006 ‘Stern Report’ which forgets that things are more likely to change in the future than to remain as they are today and in particular (as the 2014 IPCC AR5 reminds us) that by 2050 people will be on average much wealthier than we are today. He sits as co-chairman and prime mover of the new panel which repeats this error. The September 2014 Calderon/Stern report also fails to grasp the nature of the problems that ‘green growth’ must surmount to succeed.¹³ At root, it does not understand why energy is unlike other inputs into economic activity.

Reviewing “Stern 2.0”, the economist Richard Tol summarises Stern’s second iteration of his 2006 arguments: “The new report makes three claims, none of which stand up: that climate policy stimulates economic growth; that climate change is a threat to economic growth; and an international treaty is the way forward.”¹⁴ Launched with huge fanfare, “Stern 2.0” had no evident impact and had vanished from discussion by early 2015.

In particular, such accounts are misled about the assumption that economic growth can be maintained by factor substitution and successful technological innovation in the face of rising energy prices.¹⁵ Also, Tol wonders whether “...perhaps Stern 2.0 mistook rent seeking for wealth creation”?

WHAT REALLY LINKS ENERGY AND WEALTH: INTRODUCING ‘THERMO-ECONOMICS’

transition actually are, is in J. Constable, *The Green Mirage*, Civitas, 2011 upon which analysis the previous paragraphs also rely.

¹³ *Better Growth: Better Climate: The new climate economy report, The synthesis report*, (hosted by WRI) Sept 2014 (Publication of this summary report precedes the full exposition which is common in stealth issue advocacy.)

¹⁴ All the academic criticisms of Stern’s assumptions are conveniently collected in P.Lilley, *What is wrong with Stern? The failings of the Stern review of the economics of climate change*, GWPF 2012; R.Tol, “Stern 2.0 takes climate policy analysis to a new level of exaggeration” *The Conversation*, 19 Sept 2012, <https://theconversation.com/stern-2-0-takes-climate-policy-analysis-to-a-new-level-of-exaggeration-31763>

¹⁵ On the latter point see A. Turner, *Just Capital*, Pan Books, London, 2001, p 286 *cit* J. Constable, “Thermo-economics: Energy, entropy and wealth,” *Economic Research Council*, Vol 44 (2) Summer 2014, p.5

In his seminal new work which introduces the concept of ‘thermo-economics’, John Constable returns to the nineteenth century origins of economics. He observes that for a century and a half the labour theory of value has focussed attention on that particular transformer of energy into value above all others. However, he explains, it is both an incomplete but also an obscuring account.

The revealing clue lies in W.S.Jevons’ introduction to his path-breaking book *The Coal Question* in 1865. In it, Jevons makes convincingly the case that “coal in truth stands not beside *but entirely above all other commodities*. (Emphasis added.) It is the material source of the energy of the country – the universal aid – the factor in everything we do. With coal almost any feat is possible or easy; without it we are thrown back into the laborious poverty of early times.”¹⁶

As Constable explains, today’s capital stock of goods and structures is best understood as rendered (that is, materially solidified) energy expended in the past. High-density fuels liberated mankind from “laborious poverty.” Jevons’ combination of adjective and noun is very apt. The escape from poverty is impossible without first a release from the tyranny of time-consuming work. Wealth accumulates as a result of the time set free, skills empowered and complex goods thus resulting by converting low entropy fuel (coal) to high entropy products of combustion: in Constable’s words, “previous energy consumption is rendered in the current state of affairs as the improbable complexity that we value.”¹⁷

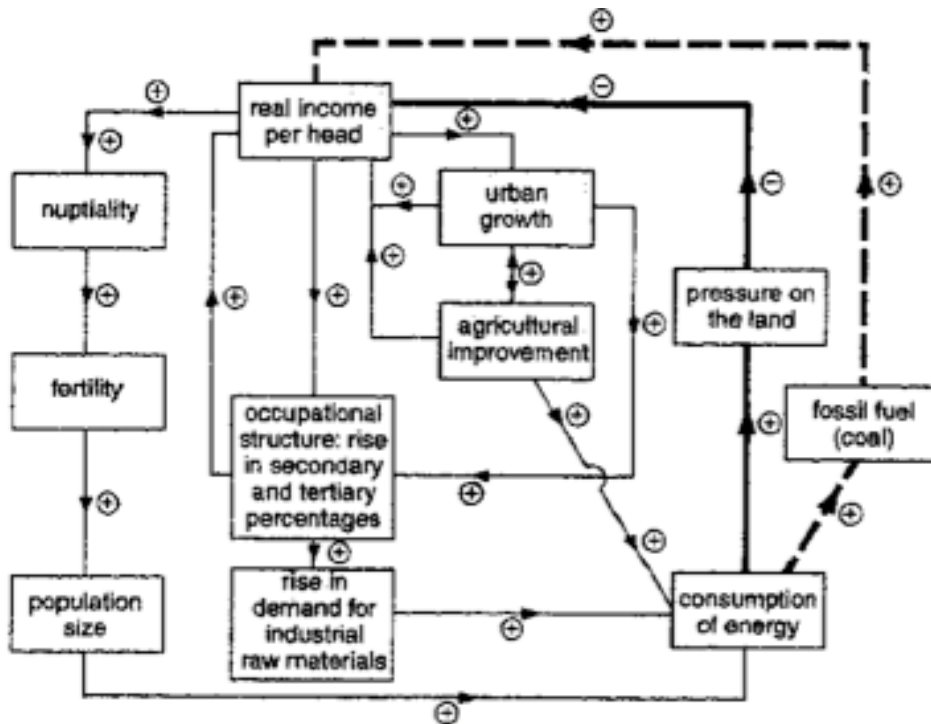
The central question today is whether anything has changed. To assess this, it is important to grasp just how unusual the ‘zero carbon/green growth’ project really is. It attempts something that has never been done before in human history. In the search for sufficient usable power with low or zero environmental impact to drive modern societies the plan is to transition *backwards* from dense, constant and cheap (currently 98.4%) to thin, intermittent and costly (1.6%) primary energy sources - and to reverse the percentages - while aiming to produce high quality (electric) dispatchable power from them by a process of concentration of energy. Furthermore, the plan is to force a policy-driven fast transition *against the price gradient* while maintaining positive economic growth; and to get spontaneous adoption of

¹⁶ W.S.Jevons, *The Coal Question: an inquiry concerning the progress of the nation and the probable exhaustion of our coal mines, 1865*, General Books, Memphis, 2012, p.2, discussed at Constable, *Thermo-economics*, p.7

¹⁷ Constable, *Thermo-economics*, pp 8-9

these sources. Such a project is indeed heroic in its assumptions about what is possible by persuasion rather than brute force.

The point is best appreciated concretely and in an historical perspective, by contrast with the last energy transition. Sir Tony Wrigley, one of the pioneers of the Cambridge Population History Group (Campop), elegantly summarises the achievement of the English industrial revolution in a flow diagram. It illustrates how the first industrial revolution achieved ‘escape velocity’ from the constraints of photosynthetic power and illuminates just what Jevons meant by the escape which coal provided from the ‘laborious poverty’ of the organic economy to which the green idealists would now return us.



This diagram shows the operation of the organic pre-industrial economy and the escape route into unconstrained growth. In the organic economy, all the links are positive except one. Whereas Wrigley reminds his readers of the astonishing success with which the agricultural revolution in England mobilised tractive power by growing oats to feed the horses who provided it, both to drive the revolution in biomass productivity per unit of land through land improvement and to feed the growing urban population, the link between pressure on land and real income per head, is ultimately negative. It shows the

self-limiting restraint on growth in the closed system of an organic economy where all power derives from contemporary or relatively recent and hard to replace (wood and charcoal) photosynthesis. What permits the energy transition into economic take-off is the opening of a route which circumvents the limits on production and use of photosynthetic energy. That escape route is coal. It has a positive sign linking the consumption of energy to real income growth, by-passing the roadblock of pressure on land.¹⁸

The current proposed energy transition seeks to close the escape route while retaining the growth trajectory to which we have become accustomed. To do this it once again has to employ 'ghost acres' to grow organic fuels. For one topical example, responding to subsidy inducements, Britain's biggest coal-fired power station at Drax has converted one unit to wood-chip firing, using felled primary forests shipped across the Atlantic from the Georgia wetlands in the USA. Alternatively, the 'green' energy transition has to rely on uncontrollable generators for base load power. The improbability of sustainable success in its own terms is immediately evident, most especially when the need for high energy embedded energy inputs into the manufacture of new collectors is included in the picture. Therefore it must always be borne in mind that the sheer ambition of what is being proposed for climate and energy policy is so great that failure is a likely outcome even if all the policy instruments were to work.

A vital new insight follows from Constable's assessment of current policies in light both of a return to the fundamentals of energy economics and of the history of the first industrialisation. Modern society is rich from its legacy of rendered – embodied – past use of coal and oil, so it can afford luxuries. Therefore it can, of course, choose to increase its energy costs voluntarily, as a luxury expenditure, by returning to an organic economy. But there will be a negative effect, which, although delayed, cannot be escaped. It may also be the more grievous and less recoverable because of being veiled from sight at the outset. The UK, Constable reminds us, will be adding £8bn per year extra to its electricity costs by 2020 in order to satisfy the EU Renewable Energy Directive. Or on a wider scale, Germany can choose to follow an *energiewende* which is expected to add 40% to domestic energy bills by 2020, but it is costing 16 bn euro per year and is already handicapping German industrial competitiveness.

¹⁸ E.A. Wrigley, *Energy and the English Industrial Revolution*, Cambridge University Press, 2010, pp. 175-78

Our economies can recover from shallow self-inflicted wounds because of the “...accumulated and inherited wealth ... so familiar a background to our daily activities that we tend to neglect it, or at least we regard it as a minor contributor to contemporary output.” In similar vein to Vaclav Smil’s path-breaking insights on energy and materials, Constable suggests that a forced energy transition against the cost gradient drives resources of all necessary types (land, labour, capital, time and intellectual energy) into the energy sector once more, which is inevitably an opportunity cost choice against other capital accumulation including intellectual invention: hence the need to draw on accumulated surpluses. So during the first phase of such a process – the German *energiewende* for example – the degree to which the general economy is poisoned is not noticed. Why? Because slowing or stopping the current margin of accumulation is compensated by withdrawals from the savings bank of the past capital stock, built up on cheap energy. But that savings account is not infinite. Germany is determined to remain a major manufacturing and exporting economy, but is hurting itself gravely by this insidious poisoning. About half of domestic bills is now accounted for in taxes and ‘green’ subsidies. In late November a major sign came with the decision of E-ON the German energy giant to split its operations in two so that it could concentrate on rent-seeking profits from the *energiewende* while cauterizing losses in the conventional power sector. RWE, in contrast, has invested in large scale coal opening its newest plant at Hamm outside Dusseldorf this month.¹⁹ These are not signs of coherent policy.

CONTRADICTIONS BETWEEN EU PERFECT VISION AND ENERGY SECURITY POLICIES

Even in turbulent times, it can be safely predicted that the 20:20:20 and 2030 targets will remain as headline statements of EU policy.

It would simply be too embarrassing to abandon them formally, just as the British Parliament will probably not repeal the 2008 Climate Change Act even if it cannot be obeyed. But this does not mean that they will be pursued to the letter – or at all. The January 2014 announcement to withdraw from binding targets is in fact a veiled admission of error in having tried to impose the RES;

¹⁹ Constable, *Thermo-economics*, pp 11-12; D.Fortson, “Europe winds back the clock on windmills”, *The Sunday Times*, 23 November 2014, http://www.thesundaytimes.co.uk/sto/business/energy_and_environment/article1486674.ece; Reuters, “E.ON to quit gas and coal and focus on renewables” *The Guardian*, 1 December 2014, <http://www.theguardian.com/environment/2014/dec/01/eon-splits-energy-renewables>

but it cannot be said out loud, although the out-going Energy Commissioner Gunther Oettinger did break ranks a week after the policy was launched to describe the 2030 target as both unachievable and foolish.²⁰

20:20:20 - the climate and energy package - is “a set of binding legislation which aims to ensure the European Union meets its ambitious climate and energy targets for 2020.” It stated that

these targets, known as the "20-20-20" targets, set three key objectives for 2020: A 20% reduction in EU greenhouse gas emissions from 1990 levels; raising the share of EU energy consumption produced from renewable resources to 20%; a 20% improvement in the EU's energy efficiency.²¹

That is a lot of twenties. Why? Its evolution is instructive. As it happened the author was in Brussels when the original 20:20 target was agreed (that was a 20% cut in greenhouse gas emissions by 2020). Hearing the clinking of champagne glasses in an adjacent room, he learned that this was delegates and staff celebrating the achievement of agreeing the policy. How had it been arrived at?

By analogy: 20:20 denotes perfect vision when eyes are tested by an ophthalmologist. The PR people and spin-doctors liked that subliminal message: the EU has good eyes too: be confident! It has perfect vision. So a spuriously precise target was agreed with no meaningful reference to technical assessment of feasibility. Indeed, so satisfying was 20:20 that soon a third 20 (on percentage of renewable energy) was added.

Such an insight tells us that the policy may not have been adopted solely – or even principally – for its own sake. This rhetorical gambit is widely mocked, and undermines credibility. As Professor Dieter Helm has said, repeatedly, the problem is that *no one* believes that the targets are realistic. Even the Commission’s own words betray their own flippancy.

Rent-seeking special interest groups can be expected to support any policies which fill their boots; and so long as there was a political advantage to the EU in its scramble for legitimacy among European voters, and prestige on the world stage, the huge priority given to climate policy in the last year of the

²⁰ <http://www.euractiv.com/energy/oettinger-rallies-opposition-203-news-533084>

²¹ http://ec.europa.eu/clima/policies/package/index_en.htm

Barosso commission, whose plans would have made this one of the major demands on EU tax income, could be justified.

But if either of these assumptions turn out to have changed? This may explain in important part the background to the major reversals of policy implicit in the events of September 2014.

In January 2014, the Commission presented its proposals for the next policy round after 20:20:20. The 2030 policy ramps up the targets: 40% reduction of greenhouse gases from 1990 levels by 2030; 27% of EU energy to be from renewable sources by 2030; energy efficiency to be increased by 30% by 2030. Once again, that pleasing symmetry of numbers that spin-doctors love.

However, there is an important difference in governance from its predecessor, which introduces a revealing incoherence. Whereas the previous regime was to be imposed on the nations at EU level by “binding legislation” (whatever that is) in 2030 the execution is devolved to nation-states who may (or may not) wish to effect it to meet a non-binding target at EU level.²² The EU Council meeting of 20-21 March agreed to take a view on the 2030 policy framework by October 2014 at latest. It was adopted at the Council, but in effect the signal was present in the drafting, as just noted.

Repeating his January dissidence once more, as his tenure as Energy Commissioner drew to a close and a new post as Digital Economy Commissioner in the Juncker Commission beckoned, Günther Oettinger called for conditionality. He argued that a position similar to that being taken by the Abbott government in Australia would be prudent. “If there is no binding commitment [at the Paris 2015 Climate Conference] from countries as India, Russia, Brazil, the US, China, Japan and South Korea, whose governments are responsible for some 70% of global emissions, I think it is not really smart to have a -40% target [for the EU].”²³ Perhaps such a position would be a prudent choice for Japan also?

²² http://ec.europa.eu/clima/policies/2030/index_en.htm. This, of course, is the same salutary reality-check which hit the UNFCCC after the failure of the 2009 Copenhagen Summit, and which took policy effect with the adoption at the Durban Summit in 2011 of NAMA (Nationally Agreed Mitigation Actions) as the prime mover for any future action (see further below).

²³ <http://www.theguardian.com/environment/2014/sep/25/europe-should-only-cut-carbon-if-world-agrees-paris-climate-deal-eu-energy-chief>

RUSSIA RETURNS TO OPEN HOSTILITY AND EUROPEAN POLICIES RESPOND

But it may not be decided as a matter of voluntary choice or the outcome of policy debate because other factors intervened, notably Russia in Ukraine. A watershed in European affairs was crossed on 21 March 2014 when the post-soviet era that began with the failure of the *coup d'état* in 1991 abruptly ended. As the EU national leaders met in Council in Brussels, also (and probably not coincidentally) in the Kremlin Vladimir Putin signed Russian ratification of the annexation of Crimea from Ukraine and into the Russian Federation. In alarmed response, the Council instructed the Commission to prepare an EU energy security strategy also - and quickly.

After frenetic activity, on 28 May the Commission issued an urgent Communication which was followed by a more worked-up Commission staff study that was released on 2 July, just as the summer holidays were beginning. This was adopted by the October Council too.²⁴ 2030 energy and climate policy and the energy security strategy were both on the table. Yet these documents contradict each other. In fact they read as if coming from different worlds; and so they do.

Here, to contrast with the 2030 goals cited above, is the introduction to the July energy security working study. Words, concerns and flavour are quite different:

As energy has come to be a vital part of Europe's economy and of modern lifestyles, we have come to expect secure energy supplies: uninterrupted availability of energy sources at an affordable price. We expect to find petrol at the pumps, gas for heating and, in this computerised era, non-stop electricity, with blackouts too disruptive to countenance. We also expect supplies to be affordable.

One is realist, the other is idealist. One is overwhelmingly about high energy-density, dispatchable fossil fuels which (as the study's charts show) supply the vast bulk of the energy needed to support the requirements specified in the quotation. It discusses the geo-politics of pipelines with a time-line set by the coming winter weather. Its policy concerns are about building strategic gas interconnectors, increasing access to non-Russian oil and gas markets; reducing

²⁴ http://ec.europa.eu/energy/doc/20140528_energy_security_communication.pdf;
http://ec.europa.eu/energy/doc/20140528_energy_security_study.pdf

tax burdens on certain fuels (like diesel); increasing indigenous energy exploration.

The other is about the low energy-density, intermittent energy flows that currently cannot remotely sustain the ambitions of citizens as quoted. It is about increasing taxes (for example on diesel). It offers windy aspiration and no stimulus for shale gas exploration or exploitation and cites as authoritative dubious propositions about what is economically beneficial and achievable. Reports and personalities are brandished for their prestige, in the manner that the status of oath-swearers - not the quality of their evidence - settled cases in the Anglo-Saxon *witenagamot*.

Shortly, before winter set in, a formal choice was made between these two approaches. The evidence is that it probably had been done in the Commission well before. With Mr Putin's help it had discovered some harsh truths of power politics. The simultaneous endorsement of the toothless 2030 climate action policy and the vigorous energy security plan by the October EU Council confirmed that the lesson was learned in the national capitals also.

In contrast, as will now be discussed, the reaction of NGOs and of some members of the EuroParliament showed that they were still living in the previous era and were prepared for a confrontation with the Juncker Commission which could lead to poker over the endorsement of some Commissioners, including Miguel Arias Cañete, whose nomination for the new combined energy and 'climate action' portfolio by Commission President Jean-Claude Juncker was announced on 10th September 2014. The fact that the environmentalists, the Parliamentarians much Press, and a huge social media campaign to block Cañete were rather brutally squashed and swept aside is a measure of the transformation of EU priorities that occurred over 2014.

PEOPLE CHANGE IN BRUSSELS

Although the EU is a deeply bureaucratic organization, personalities can be important. This was certainly the case in the Barosso cabinet. The priority to be accorded to climate issues was signalled bureaucratically in the fact that the subject had its own power base in a commissioner and her new department (Directorate General) and - crucially - funds to sustain lobbyists, NGOs and subsidies. But its prominence as a leading edge issue in EU policy was in

considerable part ensured by the vividness of the personality of the Commissioner, the former Danish Environment Minister Connie Hedegaard.

Mrs Hedegaard was the youngest MP in Denmark when first elected at the age of 23 in 1983. In August 2004 she was appointed Danish Minister for the Environment. In 2007 she was in charge of setting up the Danish Ministry of Climate and Energy, where one of the main tasks was to prepare the unsuccessful UN Climate Conference in Copenhagen in December 2009.

Ms Hedegaard had been the local chairman of the most dysfunctional in the historically unusual series of UNFCCC summits. The UNFCCC summits are dysfunctional because there is such a yawning - and probably unbridgeable - gap between the power-political interests of state parties and the rhetoric of demands for supra-national imposed actions. The rhetoric, often hyperbolic and shrill, is confected by alliances of 'stealth issue advocates' (NGOs, sympathetic journalists and researchers, a variety of rent-seeking industrial interests) in Professor Roger Pielke Jnr's memorable and accurate description.²⁵ During its ascendant years, the UNFCCC process had the same evangelical tone as the Hague Peace Conferences of 1899 and 1907.

After the failure of the Copenhagen conference, the UNFCCC found itself sailing into ever strengthening headwinds. The Executive Secretary Yvo de Boer found successive meetings increasingly difficult and emotional and eventually he resigned.²⁶ At the 2011 Durban meeting, as the present writer was able to observe, he was like a man released from prison. At last he was able to make openly the case for abandoning the approach of top down targets and timetables and to argue for one in which he actually believed - that of NAMA - bottom up Nationally Agreed Mitigation Actions.²⁷

Since Durban, NAMA have steadily advanced as the methodology of choice. A perceived advantage is that NAMA do not, by definition, make UNFCCC agreements hostage to ratification by national legislatures which might decline to do so. Such is certainly now the case in the USA, where a bitter and weakened president confronts an angry and resurgent Congress. However the disadvantage is that either nothing will happen because there is not national

²⁵ R.A. Pielke Jnr, *The Honest Broker: Making sense of science in policy and politics*, Cambridge University Press, 2007, p.7

²⁶ Dr Korhola attended the COP conferences as a delegate from the Milan COP in 2003. She analyses them all as a series, Ch 2 "The rise and fall of the Kyoto Protocol..." PhD Nov 2014

²⁷ At the Lima COP20 NAMA appear to have been enlarged to encompass "INDT" (Intended Nationally Determined Targets).

will to do anything or that executives that seek to impose unpopular measures without perceived legitimacy will simply further alienate the circumvented legislators and the voting public. It is suggested that the Lima COP20 should be assessed in these terms only. Expected demands from poor countries that rich countries must fund fully the \$100 bn p.a. promise rashly made by Obama at Copenhagen (less that \$10bn of which has been subscribed to date) form one rock on which hopes for a workable successor to the Kyoto Protocol will be dashed. Indeed both Su Wei the Chinese chief negotiator and India's delegation played this card early and the BASIC group seemed to be co-ordinating its demands. The other is that neither a lame-duck US President nor a deeply divided EU can be expected to deliver real funds at anything like this level. For early example, Prime Minister Cameron faced bitter domestic criticism for authorizing already ear-marked funds in the British international development budget. So the words really lack credibility. In such circumstances, NAMA offer a useful way to appear to commit to action while knowing that they cannot be delivered.

A similar but tacit recognition has been seen in the EU policies with, as noted above, a move from 'binding legislation' as the motive force of 20:20:20 to a recognition of the sovereignty of nations in the 2030 policy. During this same period 2010-14, Ms Hedegaard's DG came increasingly into conflict with that concerned with EU energy policies, headed by Günther Oettinger. This was plainly both a 'turf war' between rival bureaucracies but was also a clash of personalities and it came to be a noted feature of the closing years of the post-soviet interlude in international affairs. Visible public disagreements, noted above, were in January and September 2014. The point at issue was that during the last years of the Barosso commission, the ability of the Hedegaard agenda to occupy the central prominence which it has earlier had, waned.

At things stand at this writing, it is probable – and even on balance likely - that she will have been the EU's first and last Commissioner for 'climate action'. Hedegaard was an unusual Commissioner, coming from an EPP background but then 'getting religion' on green issues. She did not receive a second term not least because the EPP would not have supported her any more.

But the current changes have deeper drivers than clashes of personality. So how has this come about? In addition to the detailed subject-specific causes analysed above, two contextual circumstances have changed sharply. Each has affected the balance of power between DG Energy and DG 'climate action' to

the detriment of the latter, which, despite the impassioned rhetoric, comes daily to look more like a voluntary entertainment for easier times.

First, and currently dominating European external and trade politics, is the quickly rising importance of traditional energy security issues as Putin reasserts Russian hostility to the post-Soviet settlement of 1991 in a global context where Middle eastern politics once again complicate European, Chinese (and especially Japanese) energy security of supply from that region.

ENERGY GEO-POLITICS RETURN TO CENTRE STAGE

The problem of Putin's Russia is compounded by the on-going energy-geopolitical civil war between Muslims in the Middle East. Saudi Arabia, supported quietly by Egypt, Jordan (and Israel), are on the one side. A motley combination of three camps of totalitarian Islamists stands on the other: three poisoned branches from the same ideological tree. First there is Iran (running Hezbollah and, with help from Putin, Assad). Then there is the Muslim Brotherhood and allies (Qatar, Turkey, Hamas). The third group of Islamists consists of the Da'esh (ISIL) and Al Qaeda (sometimes fighting each other, sometimes not). At the moment, the Iranian pursuit of the nuclear weapon is the epicentre of danger to the whole post 1945 world order as well as the region. But intellectually weak geo-political analysis in Washington and Europe means that the fact that (for the moment), the Iranians also fight our enemies, the Da'esh, makes them seem to be our friends. This has given credence to a P5+1 process which looks likely to produce the worst outcome, namely a leaky and vague diplomatic instrument that cannot prevent breakout. If that happens, all bets for global security are off – which is another subject.

Why this largely misunderstood collapse of the state system in the Arab world has relevance to this analysis is that it has a potential to compromise European, Japanese (and Chinese) oil and gas supplies. To lose access on both fronts, at a time when LNG reverse-piped into the European gas network is an important part of the defence against possible Russian gas blackmail, would be a major problem. Just how seriously this ambitious plan is being developed became clearer in more detail in February 2015 when details of American plans to support this defence by aggressive pipeline and terminal construction as well as encouragement of American companies to bid to build new nuclear plants and to start fracking in Europe, were revealed. Amos Hochstein, the State Dept's

Special Envoy for International Energy Matters, described it as “a chess match” with Russia trying to block US moves by buying up European pipelines, offering sweet deals and dark threats.²⁸

Egypt and Israel efficiently damaged the Muslim Brotherhood terrorist cats-paw, Hamas, during the Protective Edge operations in Gaza over the summer. Although delayed by President Obama’s chronic indecision, destroying the Da’esh ‘caliphate’ is now plainly beginning, with coalition air strikes on its power-base in the ungoverned part of Syria as a first step in military operations. The oil markets signalled confidence that the August threat in Iraq after the terrorists over-ran the Mosul oil-fields, has receded. Since then the Da’esh have been being contained and pushed back, responding with ever increasing internet-transmitted barbarism. The Da’esh is a modern, highly effective totalitarian and terrorist fantasy on a 7th century theme.

Saudi Arabia and Iran are the two principal state entities in mortal conflict. The oil price drop must always be viewed through that proposition. “The Spigot” is a Saudi weapon to cripple Iran. Increasing production in the short term for local reasons, for example resentment of Iranian exclusion of Saudi interest in the now collapsed state of Yemen, then developed into a full-blown policy to try to squeeze out high-cost competitors in order to retain OPEC market share.²⁹ Given the source, it is not unreasonable to imagine a coincidence of Saudi-Arabian and American interests to see pressure increase on Putin’s regime as well as on the Iranians. That is not the same as a conspiracy theory, simply a consequence of market dynamics responding to the loss of Saudi position as the decisive swing producer, but nonetheless producing a real effect.

That pressure was evident in the 9% collapse of the Rouble on 1 December followed by the further 10% collapse on 15th despite the emergency rate hike to 17% that day, inflation rise to 10% and the Russian central bank prediction of deep recession for 2015. The Rouble has lost half its value against the dollar

²⁸ B Klapper & M Lee, “ US, Russia at odds over energy in Cold -War style conflict,” Associated Press, 4 February 2015 See http://hosted.ap.org/dynamic/stories/U/US_ENERGY_COLD_WAR?SITE=CARIE&SECTION=HOME&TEMPLATE=DEFAULT

²⁹ This was confirmed in terms by Prince Turki al-Faisal al-Saud (former Saudi Ambassador to the USA and Head of the Saudi Intelligence Service) speaking in London on 2 December 2014. Professor O’Sullivan of the Harvard Belfer Centre for Energy Geo-politics is not alone in thinking that the Saudis will neither risk too complete a price collapse, nor succeed in squeezing out US shale. See http://belfercenter.ksg.harvard.edu/publication/24818/saudis_wont_let_oil_freefall.html and “Sheikhs v shale” *The Economist*, 6th December 2014, p 15

since January 2014. The failure of the central bank's biggest weapon meant that capital controls are the only remaining recourse. The White House has made it clear that it has no intention of lessening the pain for Mr Putin. Sergei Shvetsov, deputy governor of the central bank said on 17th December that the situation was 'critical': "I couldn't imagine a year ago that such a thing would happen - not even in my worst nightmares."³⁰

But the West should be careful what it hopes for. Putin cornered could be much more dangerous than he has already been. The upsurge of renewed war in Ukraine in early 2015 may be seen as evidence of that. After successes in Crimea and eastern Ukraine, in August Putin escalated the classic KGB tactic of deniable intervention (called 'hybrid warfare' by some). He has the measure of the present Western leadership which under the limp hand of President Obama is timid and tardy in the use of force or of forceful diplomacy. This was plain especially after the weak response to the shooting down of the Malaysian airliner MH-17 by Russian-backed rebels in eastern Ukraine on 17 July, using a sophisticated Russian Buk high altitude anti-aircraft missile. He plays double or quits. To date, he has guessed correctly that no European leader has the stomach to call his bluff and for the moment has broadly succeeded in his objective to set the terms of Ukraine's relations with the rest of Europe.³¹ The resumption of major war in eastern Ukraine in February 2015 and Mrs Merkel's prudent advice that people should be prepared for the failure of the desperate diplomatic efforts of herself and President Hollande, serve to underscore this.

However, the steep and continuing collapse of the Rouble and the underlying failure of the Putin years to achieve any significant diversification into a non-oil economy put Russia in a very weak position. Since 2000 Russia's Real Effective Exchange Rate (REER) has doubled and the proportion of GDP represented by non-oil exports has fallen from 21% to 8%. The trillions of dollars of high-price oil revenue have been bled off in corruption and waste. This puts Putin in a tight corner; but with very high public approval ratings, the temptation to present his mismanagement of the Russian economy as the consequence of a western plot may be irresistible. Certainly Mrs Merkel's terms for lifting sanctions by termination of Russian backing of dissident eastern Ukraine are

³⁰ "Russian financial crisis looms as rouble turmoil causes global jitters" *The Financial Times*, 17 December 2014,

³¹ "Win some, lose more: How the West lost Ukraine," *The Economist*, 20-26 September 2014, pp 39-40

not acceptable to him. The collapse of the rouble is the biggest currency rout in a generation. The full extent is not yet evident but the dynamic is plain.

It is against this background, in the face of this coldly calculating enemy, that the energy security policy became one of the top priorities of the Juncker Commission when it came into power in November 2014. It will not be interpreted in its own terms alone, but closely correlated with the visibly hesitant European moves towards applying more stringent systemic ('Tier III') economic sanctions on Russia (which do not allow Russian companies access to international lending for longer than 30 days, thus forcing them to fund borrowing roll-over in dollars or euros with Russian central bank reserve foreign reserves. Rosneft's need was the immediate trigger of the December crisis³²). There is much fear in Germany, France and Italy that such sanctions could damage their export markets at a time of great fragility in the Eurozone economy. Therefore it is noteworthy that the EU sanctions package has been skewed towards denial of Russian corporate access to global financial markets, which will damage disproportionately the City of London's interests. In the eyes of many in Brussels, that is seen as an additional advantage to the package.

The blight of Putin is therefore directly linked to a second dominant contextual factor via the weakness in the Eurozone economy: the baleful return of the Euro crisis after two years of temporary reprieve. This and nothing to do with 'climate action' is the dominant strategic risk facing the EU entering 2015.

THE DEEPENING CRISIS OF THE EUROPEAN SINGLE CURRENCY

In London on 26 July 2012, Mario Draghi, President of the ECB, had promised that "...the European Central Bank is ready to do whatever it takes to preserve the euro. And believe me, it will be enough...we think the Euro is irreversible".

That speech was made with the full agreement of the German finance ministry. But by the autumn of 2014, the effect of those promises is dissipating fast. The Euro has continued to weaken steadily against both the Dollar and Sterling during the last three quarters. (Sterling had a 5% wobble before the Scottish Independence referendum from which it quickly recovered after decisive

³² Sergei Guriev, "Russia is heading into an economic storm without a captain" *The Financial Times*, 17 December 2014 explains the significance of the Rosneft detonator to the rouble collapse.

rejection of the break-up of the United Kingdom and at year's end was trading at a four year high).

Against the Yen, the picture has been less clear-cut because of the different but continuing challenges within the Japanese economy arising both from its sharp post Fukushima deterioration of balance of payments surplus and the difficulty of making the 'Abenomics' stimulus self-sustaining which, at this writing, looks increasingly difficult as Japan returns sharply into recession. Whether Mr Abe's renewed December mandate from a sullen electorate will give him sufficient leverage to reverse these trends is not at all clear. Therefore the incentive for the renewed Abe government to follow Mr Juncker's example (see below) by dumping quickly the expensive luxury of technically marginal or actually counter-productive 'climate action' policies may be compelling.

Returning to the recent history of the current European financial crisis, in a world where the Eurozone has stubbornly failed to move to any credible recovery, stuttering along with minimal or no growth, where markets mistrust equities and are prepared to buy the safety of German Bunds at negative real rates of return, Draghi's 22 August 2014 speech at Jacksons Hole was first seen to be a reiteration of that 2012 resolve.

But crucially, by then, the ECB was in conflict with the Germans. Draghi seemed to recognize in the Jackson Hole speech that deflationary pressures are taking hold and he seemed to have switched sides, now supporting the criticisms made by France and Italy. A distinguished economic and financial journalist who has the longest track record of success in predicting the vagaries of the Euro crisis, described it as "...one of the strangest episodes in ECB affairs...one might suspect that he has reached the point of emotional rupture, too sensitive to continue defending the indefensible, aware that the Project is beyond saving. He already looks like a man preparing for his new destiny in Rome as Italy's salvation president.³³ Italy at this writing is still 9% below its 2008 GDP, with a contracting economy and facing a debt trap. In the past, repeated devaluations of the lira permitted export-led recovery; but inside the strait-jacket of the Euro that option is not open. Italian sovereign default, were

³³ A. Evans-Pritchard, "It's wishful thinking that the ECB is about to launch QE," *The Daily Telegraph*, 4 September 2014, p B2

it to come, would be a detonation sufficient to blow the Eurozone apart. So should he return to his homeland, Mr Draghi will have his work cut out.³⁴

Whereas President Napolitano confirmed that he would leave post at the end of the year because of old age after an unprecedented second term, Mr Draghi's moment is not yet. Were Mr Draghi to leave the ECB at the present fragile moment, of course it would shatter market confidence in the single currency overnight. Instead the crisis stumbled through two further stages during November.

First, on 5th November, Draghi tried to defy the Bundesbank by bouncing the ECB into a trillion euro stimulus without the acquiescence of either German or the northern creditor bloc. The split between North and South was gaping. Rumours about the ECB meeting included allegations of a stormy row between Jens Weidemann of the Bundesbank and Draghi and accusations that papers were withheld from German members of the Executive Board to prevent them having prior warning to obstruct Draghi's QE initiative. Reuters reported on 6th that the attempt was made in defiance of an explicit order not to do so, backed by all Northern Eurozone governors except Belgium and Finland.

Draghi is, of course, correct to try to stimulate the Eurozone. But the November showdown demonstrated that he was powerless to do so via the ECB at that moment. The collapse of investment on the one hand and the political surge of rejectionist politics across southern Europe are different witnesses to the same fact. In France Marine le Pen's Front National is pledged to restore the franc. She leads the Presidential polls at 30% and her party threatens the French Socialists with oblivion. In Italy the Five Star Movement of Beppe Grillo is an 'anti-party' party, yet won over a quarter of the vote in 2013 and is committed to immediately leaving the euro. The traditional portfolio ideological parties of 'left' and 'right' in Italy are caught in a pincer between the anti-party party Five Star and the resurgent regional nationalist Northern League. In Spain, another 'anti-party' (Podemos) has swept from nowhere to 28% in a year and calls for massive increases in public spending to support a minimum wage and other policies totally at odds with current ECB strategy. The underlying cultural and political point is developed in the final section below

Therefore at the end of the month, the Juncker Commission made its own move. On 26th November Mr Juncker unveiled a proposal for a European Fund

³⁴ R.Bootle, "The solution to Italy's woes is quite simple – leave the euro", *The Daily Telegraph*, 22 September 2014, p B2.

for Strategic Investment in a speech to the European Parliament at Strasbourg. Warning that this might be the eurozone's 'last chance' he sought to stimulate the low rate of investment (2% of GDP - half the US level) with 21bn euro seed money which, with associated reduction in red-tape and a roster of infrastructure projects, he suggested could leverage up to 315 bn of private investment. Describing this as a form of alchemy, *The Economist* was typical of the financial press in its generally sceptical view of a stimulus package amounting to 0.8% of EU output over its projected three year span. If this was the nether mill-stone, the upper one came in the complaint of German Economy Minister Sigmar Gabriel that the European Commission's 300 billion-euro plan to boost investment in Europe was not big enough and lacked details, The amount is "not only not enough" but it is not clear what the money will be used for, Gabriel told reporters in Berlin. "I'm totally against putting up a stimulus programme," he said, arguing it would be just a 'straw fire' and that at the end of the day the money would be gone and nothing lasting would come out of it.³⁵

In any case, with the prospect of an early general election in which the far-left Syriza party of Alexis Tsipras, now the second largest party in the Greek Parliament, was the favourite, December opened with the explosive return of the Greek political crisis, which is where the current cycle of the Eurozone tragedy began in 2012 after Mrs Merkel was persuaded not to eject Greece from the single currency in late 2011 because of the fear of contagion to Italy and Spain. Tsipras has announced root and branch rejection of the ECB austerity programmes, a policy which is wildly popular with his electors suffering under the ravages of poverty and unemployment that the euro has imposed on them.³⁶ Tsipras said that the markets will "have to dance to Syriza's tune". More likely, commentators mostly said, Tsipras will be forced to compromise. But that will not be without cost and is by no means certain. The snap Greek election was confirmed at the end of December to be on 25 January 2015 and in the event Syriza won convincingly. Since then it has become clear that it is by no means clear that Greece will compromise. On 8th February Alan Greenspan,

³⁵ <http://www.bloomberg.com/news/2014-11-23/how-the-eu-plans-to-turn-26-billion-into-390-billion.htm>; Charlemagne, "Europe's great alchemist" *The Economist*, 29th November 2014, p.38; "Germany says Juncker plan short on cash and details, *Reuters*, 1 December 2014, <http://www.reuters.com/article/2014/12/01/us-eu-investment-juncker-germany-idUSKCN0JF2IZ20141201>

³⁶ G. Christides, "Greek radical left prepares for power under Tsipras", *BBC News*, 16th December 2014, <http://www.bbc.co.uk/news/world-europe-30481307>

former Chairman of the Fed, pronounced his view that Greece would have to leave the Euro and should do so in its own interest. From this report it will be plain that the author has never understood how anyone ever believed that a political currency project like this could ever survive. It would be historically unprecedented if it did.

In the rolling drama of the Euro, a *deus ex machina* entered the stage on 13th January. Pedro Cruz Villalón, an advocate-general in the European Court of Justice, gave a ruling which was taken to allow bond purchasing by the ECB. Critics of QE were quick to point out that this opinion flatly contradicted the ruling of the German Constitutional Court in Karlsruhe. So that struggle is not over yet by any means.³⁷ However, Draghi and the ECB exploited Villalón's opinion to bounce Mrs Merkel and to announce a massive programme of QE for the next 36 months. The announcement was, deliberately one must assume, only days ahead of the Greek election. This was indeed the 'big bazooka'; and at this writing it is not yet clear what targets the first shot has hit.

However, the implication for the 'climate action' and green economy agenda of all this high drama is obvious. Since both depend fundamentally on large provision of taxpayers' money, they are unlikely to claim high priority at a moment when the entire Eurozone economy has been driven into the ground. Therefore the tension between words and actions within Europe may be confidently expected to increase. That has two further vital implications for external observers trying to assess the European scene.

The first is that the depth of internal division among the European states that was revealed during the rough horse-trading which resulted in the compromise of a toothless 2030 climate action target at the October EU Council, means that the EU climate action negotiators in Lima COP20 or elsewhere had such a weak basis of power to deliver actions that their words must be treated with much caution. The second is that the same tensions being present within European states make it unwise to rely on the deliverability of 'climate action' pledges.³⁸

However, there is a further dynamic at the national level because it is there that the irresistible need to keep the lights on collides with climate action policy. The tension is exemplified by the British Dept of Energy & Climate Change,

³⁷ C. Jones, "Legal opinion paves way for ECB bond-buying programme," *The Financial Times*, 16 January 2015 <http://www.ft.com/cms/s/0/45850d86-9bca-11e4-b6cc-00144feabdco.html#axzz3R5TEQhUv>

³⁸ G.Prins, "The Road to Paris goes via Peru. Unfortunately", *Formiche*, Rome, February 2015

described to the author by a member of the current British Cabinet as a place where “every morning one half of the civil servants come to work to try to turn the lights off and the other half to try to keep them on.”

The primary instrument of Policy is control of investment, either by inducement with subsidies or by direct investment. So there is an inherent momentum that cannot be quickly changed once investment priorities in energy generation have been changed. That momentum has been developed by ten years of ‘climate action’ priority. Now it is coming into brutal collision with higher political priorities of energy security and price. So in consequence both of this and of the changed geo-political scene described hitherto in this report, it has become much more difficult during the last six months to be able to predict which way the coiled springs of these domestic and international tensions will flick energy policy priorities in different countries in coming months and years. This is the subject of the final section of this report. But before we turn to it, we need to draw together the implications for ‘climate action’ and energy policy of the recent revolution – not too strong a word – in Brussels occasioned by the Juncker Commission.

IMPLICATIONS OF THE PROCEDURAL REVOLUTION OF JUNCKER’S COMMISSION

Even before the Eurozone shocks of November, the rouble crisis of mid December, the return of the Greek crisis at year’s end, Syriza’s conclusive victory, huge Podemos street demonstrations in sympathy in Madrid, the renewal of war in eastern Ukraine in February and the crisis in Western leadership that has deepened because of Obama’s erratic conduct had reinforced the message about priorities, the EU was in the midst of sudden and severe cultural and political crises of its own. Responding to all these, Mr Juncker announced a re-structuring both of the portfolios and the function of the EU Commission. His changes retrench its concerns to core traditional issues and centralise decision-making; and the November-February crises serve to embed them even more strongly.³⁹

The Juncker Commission is much more autocratic in its structure than its predecessor. Commissioners have lost autonomy of policy-making. They are grouped under Vice-Presidents. Only Vice-Presidents will be able to put policy proposals onto the Commission’s agenda. A First Vice-President is the next

³⁹ http://ec.europa.eu/about/juncker-commission/structure/index_en.htm

filter and only then will the President decide. There is a distinctly Soviet feel about both the process and the names which is perhaps not surprising because the process is unselfconsciously authoritarian.

Juncker has grouped energy, climate and environment portfolios together under the vice-president for energy union. This was originally to be the former Slovenian Prime Minister Alenka Bratušek. However, she withdrew because of lack of support among MEPs but actually as the sacrificial victim in the rough trading over posts in which more weighty candidates survived. She was replaced by a Slovakian, Maroš Šefcovic, who in his hurriedly convened confirmation hearings and in a clear statement of political priorities, proposed a gas-purchasing union as his leading policy. With a clear reference to Moscow, Šefcovic said EU countries must secure “much better treatment [and] much better price” when negotiating long-term gas contracts. “We are the biggest energy customer in the world, [but] are we behaving like that?” Šefcovic asked the MEPs.⁴⁰

Juncker has merged four existing commissioner posts into two. Energy and climate have been combined into one post, now held, as already mentioned, by Miguel Arias Cañete from Spain. Environment and fisheries have been merged into one, to be held by Karmenu Vella from Malta. Cañete is a political heavy-weight close to Prime Minister Rajoy from the Partido Popular, which is one of the largest traditional “portfolio” parties in the EPP.

THE HORRIFIED AND ANGRY REACTION OF THE ‘GREEN 10’

The first announcement of Juncker’s changes horrified environmental and ‘climate action’ NGOs who correctly saw their powers to affect final EU policy being considerably reduced. They objected both to the filter mechanism and to the streamlining. Tony Long of the WWF Policy Office was reported as saying that “The biggest change is the structural blocks put on any new legislative activity. Every avenue is blocked because it all has to go through a vice-president and then a first vice-president.” He was not wrong.

⁴⁰ A. Walstad, “Šefcovic vows to ‘explore’ common gas purchasing,” 23 October 2014, <http://interfaxenergy.com/gasdaily/article/13995/sefcovic-vows-to-explore-common-gas-purchasing>

The World Wildlife Fund was a signatory along with other activist NGOs of an angry protest letter sent to Jean-Claude Juncker on 11 September.⁴¹ The self-styled “Green 10” complained that

The merging of the climate and energy portfolios and putting this Commissioner under a Vice President for Energy Union could imply that ‘climate action’ is considered subordinate to energy market considerations.

Given their demonization of fossil fuels, they also objected to the choice of Miguel Arias Cañete on the grounds that, “the choice of a Climate and Energy Commissioner with well-known links to the fossil fuel industry raises issues of conflict of interest”. The former Spanish agriculture and environment minister lists holdings in two oil companies Ducor SL and Petrologis Canarias SL, of both of which he had previously been president.

In sum, as activist NGOs often do, the “Green 10” smelt conspiracy. They condemned root and branch *all* aspects of the Commission’s approach:

The structure of the new Commission, the mission letters, and the choice of Commissioners all reveal a serious downgrading of environment and a roll back of EU commitments to sustainable development, resource efficiency, air quality, biodiversity protection and ‘climate action’.

They ended their letter with an open threat to mobilise the European Parliament against the Commission in the forthcoming ratification hearings.

MEPs also protested against the merger of energy and “climate action”. One of these, an environment committee member, the German social-democrat Jo Leinen, said, “we will question him in the hearing about his commitment to a low carbon economy as well as his personal and political integrity and we expect clear answers. Parliament has refused various candidates in the past so there is no guarantee that he will come out as a commissioner.”⁴² And so they did. Cañete was given a rough time in his ratification hearing. Outside in the streets, the Greens mobilised demonstrations with posters bearing sentiments such as “no fossil fuels in my democracy” (sic). In the event, the Socialists and

⁴¹http://awsassets.panda.org/downloads/14_o89_g10_open_letter_to_president_elect_juncker_september_2014.pdf

⁴² A.Neslen, “New EU Energy and Climate Commissioner must drop oil shares,” *The Guardian*, 12 September 2014; <http://www.theguardian.com/environment/2014/sep/12/new-eu-energy-and-climate-commissioner-must-drop-oil-shares>

the EPP (conservative) groupings threatened mutually assured destruction: to destroy each other's main candidates – the French Muscovini and the Spanish Cañete – if either were touched; so neither were. The unpopular Slovenian light-weight Alenka Bratušek was thrown overboard to register a symbolic victory for the MEPs and the concerted protests against Cañete were all ignored.

In fact there seems little conspiracy about it. It was all rather straightforward. Juncker's Mission Letter to Miguel Arias Cañete listed his tasks. The energy security and wider energy issues all precede any 'climate action' tasks. From what is known about Cañete's own interests and past careers, they would seem to match that ranking of priorities.⁴³ Furthermore, as the 'Green 10' complained, but as is quite logical if the priorities are what they clearly appear to be, he reports to the Vice President for Energy Union who in any case he outweighs in terms of political clout.

In sum, the Juncker Commission seems to be shaped for a set of high priority tasks, mainly determined by the major crises facing the EU in the last quarter of 2014 – the collapse of the Eurozone, social foment in southern Europe, Russian hostility, Islamist terrorism, gas-supply threats and security, the oil price slump - of which 'climate action' is not one. The authoritative EurActiv web-journal judges that "climate action" is the biggest loser in the new Commission.⁴⁴

This same assessment was made in the first draft of this report in September 2014. Then on 16 December 2014, *The Wall St Journal* obtained early sight of documents which appear to confirm the analysis substantively and in detail. First, the Juncker Commission intends to start to operate more closely as a supra-national European government. Therefore it will not be bound to continue any of the policies of its predecessor, the Barosso Commission. A spokesman for Mr Juncker is quoted as saying, "When the new commission comes in, we're not on autopilot." The Vice President of the new Commission, Frans Timmermans of the Netherlands, has reportedly prepared a plan to scrap 80 of 415 pieces of unfinished legislation inherited. These include two showcase environmental policies, which have both European Parliament and national government support. One is a proposal to lower ambient air pollution levels; the other, the so-called 'circular economy' policy which raises requirements for re-cycling of waste. A spokeswoman for Mr Juncker commented: "We agree

⁴³ http://ec.europa.eu/about/juncker-commission/docs/arias-Cañete_en.pdf

⁴⁴ <http://www.euractiv.com/sections/climate-environment/climate-biggest-loser-new-commission-308420>

that Europe needs to be ambitious, including on environment and social standards, but it would be pointless if we were wasting our time and energy on proposals that have no chance of being adopted and that will not deliver the results that we want to see on the ground.”⁴⁵

Environmental activist have expressed reflexive horror and repeated the now self-evident view that the Juncker Commission has relegated environmental policies to second or third rank importance.

THE POSITION OF THREE GROUPS OF EUROPEAN COUNTRIES ON ‘CLIMATE ACTION’ AND ENERGY POLICY FACING 2015

Whereas the changes in the regional and international context, including at the EU, have been both fast and unexpected for most policy-makers, national policies change at a slower tempo. They have this momentum because of sunk political capital. Politicians and bureaucrats care more about not being made to appear wrong or foolish than almost anything else. So it is hard for politicians, especially when running for re-election, to admit to past mistakes. In another part this is because of genuinely different national cultural and in consequence economic priorities.

In Europe, German public opinion is the most consistently ‘green’ and probably the most willing to bear excess costs in that cause. So there are some discernable trends. There are also discernable tensions in particular countries, such as Great Britain, which make it genuinely impossible to predict which way they may ‘flip’ when the latent tension of the political spring is released by an election result.

Therefore systematic and detailed predictions simply cannot be offered because there are too many moving parts. The eighth oil price slump of more than 30% in the last thirty years is the most recently added; for on top of the cascading political uncertainties already documented in this report, the developments in world energy markets, which have seen a 50% fall in the posted price for the benchmark Brent Crude oil price in six months, has literally knocked the bottom out of the expectations for any market comparable performance for subsidy-free ‘renewables’ any time soon, as well as voiding investment plans

⁴⁵ M Dalton, “European Commission set to scrap environmental proposals”, *The Wall St Journal*, 16 December 2014, <http://www.wsj.com/articles/european-commission-set-to-scrap-environmental-proposals-1418565529>

that are not viable at \$60/bbl for tight or deep-sea oil. As will be mentioned below, it makes the economics of Great Britain's proposed new nuclear plants 'insane'⁴⁶ In passing, one should notice that the oil price drop has destroyed the economic case for an independent Scotland that was presented in 2014, which the Scottish Nationalists predicated on an assumption of oil at well over \$100/bbl. However, despite having lost the independence referendum by a convincing margin (10%), that is no guarantee that the issue has been settled even in the short term. As will also be mentioned below, the oil price drop has led to a considerable and still emerging scandal centred on the DECC in the United Kingdom.

The 'Scarcity Peak Oil' view which environmental activists favour and which they convinced some governments, including the British government through the ideologically-driven DECC, to believe too, looks now, in the face of actual market data, to be as simple-minded and wrong as it actually is.⁴⁷ As the world's leading historian of energy comments, "Peak oil nightmares have not come to govern the oil market, which has remained well supplied at affordable prices." Renewable energy policy has not been based on an historically informed understanding of energy markets but on a simple conflation of the wish with the reality, which is always a leading sign of there being principally an ideological drive to a policy. Professor Smil recommends chamomile tea as a soothing drink to help calm over-excitables Scarcity Peak Oil believers.⁴⁸

Therefore the most helpful thing that this concluding section can offer to curious external observers of Europe in such volatile times is an over-view of some of the underlying trends and some provisional indications of what seems to be happening in three groups of European states, but principally in the core enthusiast countries. These observations are offered with the proviso that the context as just described is so unlike events before 2014 that no firm predictions can be made, particularly in countries like Great Britain which face unusually uncertain election outcomes in 2015.

⁴⁶ T. Bawden, "Era of cheap oil 'will destroy green energy revolution,' *The Independent*, 12 December 2014. <http://www.independent.co.uk/environment/new-era-of-cheap-oil-will-destroy-green-revolution-9922217.html>

⁴⁷ Scarcity Peak is to be distinguished from 'Rate Peak' which is a more empirically based and useful concept. See G.Prins et al, *The Vital Spark: Innovating clean and affordable energy for all: The Third Hartwell paper*, LSE, July 2013, pp.35-37

⁴⁸ V.Smil, "Are low oil prices good or bad?" *The American*, 22 December 2014, <https://www.aei.org/publication/low-gas-prices-good-bad/>

The position of two groups of countries in peripheral Europe – Scandinavia and eastern Europe – is in some ways more certain than the position in several of the more politically pivotal states. But developments there are simply less likely to influence direction than was the case during the Barroso Commission era. Therefore in the interests of concision, the rest of the report will address mainly the core nations whose political, cultural and industrial dynamics matter more and, as mentioned, are in several ways less predictable for external observers keen to assess the European scene.

Scandinavian influence over ‘climate action’ in Brussels is waning. Mrs Hedegaard and her Directorate General are no more and Danish wind-power is what it is domestically (around 30% of electricity consumption – a world leading amount). Less remarked is that Denmark is self-sufficient in oil. It is not likely to be more of a presence than is already known in international renewable energy markets. Vestas was a badly run and badly managed company which compounded its position in a frothy sector to cause its decline and take-over in a fire sale by Chinese interests. Likewise, Finnish commitment to nuclear and Sweden’s richness in hydro and bio-mass are uncontroversial and stable. Norway continues to manage the proceeds of its oil extraction from robust and relatively low cost fields more responsibly than any other state.

A second group of European countries comprises those within the eastern former soviet sphere of influence. All have a legacy of infrastructure priorities from that era, expressed in heavy use of coal and long experience of and general acceptance of nuclear power. The Baltic states have disengaged from the Russian sphere in many areas of life over the last twenty years but in gas (GAZPROM) and electricity continue to be linked into Russian grids. Russia’s TSO continues to maintain the synchronicity of the Estonian grid. The Estonia-Latvia connector is part of a grid system with Russia, Belarus and Lithuania. However, Estlink 1 connected Estonia to Finland in 2006 and Estlink 2 which was constructed between 2011 and 2014 and is now also operational give a material symbol of the country’s western inclination.⁴⁹ However that must be read in the light of Estonian plans to evacuate its national data-bases to servers in the west faced with the real possibility of re-occupation by Putin’s Russia as the war across eastern Europe deepens and intensifies.

⁴⁹ <http://balticbusinessnews.com/article/2014/6/25/estonia-must-disconnect-from-russian-energy-networks-as-soon-as-possible>; <http://elering.ee/the-electricity-system/>

One aspiration of the EU energy security policy developed during the summer of 2014 is to find further ways to sever Baltic connectivity into and control by the Russia. The threat of energy blackmail is one of Putin's most credible weapons and the eastern rim countries noticed very firmly how the Russian support for the eastern Ukrainian separatists had the contingent effect of depriving Ukraine of its most promising prospective shale gas plays.

The geo-political priority arising from the new Cold War trumps other concerns in this region. But that has been consistently so since the end of communism. In 1990-91 the author served as energy adviser to the federal Czechoslovak government during the first flush of excitement after the 'velvet revolution' of November 1989. Working with the late Josef Vavroušek, the Minister of the Environment, a forest resource survey showed large forest waste biomass potential. Then a detailed pilot study plan were prepared to test the potentiality for bio-gas fired gas turbine CHP as an alternative to the lignite coal-fired electricity and domestic space-heating, that was urgently phased out (as also in East Germany) as a public health priority, or new nuclear capacity: the new government had halted construction of unit 2 at Temelin in 1990. With co-operation from Cambridge and Princeton Universities, Rolls-Royce and Czechoslovak companies and agencies, a pilot BIG-ISTIG plant based on the Rolls-Royce RB211 engine was in prospect for a site near Cešky Krumlov⁵⁰. However the political priority was to boost Slovakia and in particular to invest at the troubled Bohunice site⁵¹; and in any case the initiative was lost in the 'Velvet Divorce' of the two parts of the country in 1993.

Following the divorce, both the Temelin plants were completed, with Westinghouse upgrading the Instrumentation and Control – the first time that this was done to a Soviet reactor design. Today the Czech republic has two major nuclear sites at Temelin and Dukovany, running a mature technology mix of mid-life Russian VVER reactors with western I&C which provide a third of its electricity. The country is in the German grid and supplies that country through it. However, in 2012 CEZ (the mainly State-owned operating company) had to reduce power output from its base-load nuclear stations to cope with grid surges from the increasing amounts of uncontrollable renewable energy that the German *energiewende* was surging onto the grid. Modern Czech

⁵⁰ Biogas Integrated Gasifier with Steam Injected Gas Turbine co-generation. See https://www.princeton.edu/pei/energy/publications/texts/Larson_91_Biomass_Gasifier_Cogeneration.pdf

⁵¹ <http://www.world-nuclear.org/info/Country-Profiles/Countries-O-S/Slovakia>

industry is heavily energy intensive and the Republic was Poland's principal diplomatic ally in forcing the compromise which made the EU 2030 climate action plan toothless.

The eastern rim states' strategic energy priorities are such that even the EU encountered problems in trying to promote de-nuclearisation. As a condition of entry to the EU it imposed on Slovakia the closure of two of the early Soviet reactors at Bohunice because of alleged safety fears and despite extensive upgrading of safety systems and instrumentation: Bohunice is near the Austrian border. Even here the closure deadlines slipped and there was great bitterness at such blackmail which made Slovakia an energy importer. New nuclear plants are in prospect to restore the country's energy independence.

But in the eastern rim region the key country of influence is Poland. Here the domestic picture is rather stable. Poles have consistently expressed the highest levels of support in Europe for shale gas exploration. The economy is heavily coal-fired (90%) relying on domestic sources from its huge mining industry; has severed its links to the soviet-era regional infrastructure as a consistent priority for twenty years; has successfully adopted free market economics and has successfully modernised its economy and has, of all the eastern European entrants to the EU, rapidly acquired the greatest influence in Brussels. This trajectory was confirmed with the appointment of the centre-right Polish Prime Minister Donald Tusk to be successor to Herman van Rompuy as President of the European Council, which makes him the most senior easterner to date in the Brussels hierarchy. Reportedly he was in two minds about moving from the national to the EU stage, but was persuaded by his wife Malgorzata to accept for the "prestige, better money and less problems at work."⁵²

The question is whether Mr Tusk will become 'house trained' to Brussels priorities and, even if he does, whether he will be able to influence the views of his successors at home. The evidence of Polish diplomacy during the period leading into the crucial EU Council meeting of October, described above, suggests not.

Poland's foreign minister Rafal Trzaskowski played tough from the start. Backed by the Czech Republic, but also Hungary and Romania, he threatened

⁵² M. Day, "Donald Tusk, the new head of Europe" *The Daily Telegraph*, 31 August 2014; <http://www.telegraph.co.uk/news/worldnews/europe/eu/11066174/Donald-Tusk-the-new-head-of-Europe.html>

to block the 2030 Climate Action plan unless the EU produced more real cash and not just promises of waiver and transitional exemptions. In the week before the summit, Deputy Prime Minister and Economy Minister Janusz Piechociński stepped up the pressure. Speaking on Polish Radio on 17 October, he said that “for the Polish economy minister and the majority of EU economy ministers the 40-percent option, which destroys half of Europe’s industry, is unacceptable.”⁵³ The principal opposition Law & Justice party announced that if the Polish Prime Minister vetoed the 2030 plan, he would have its support. Mrs Merkel instantly pulled back from previously strong support of the Anglo-French lead and in the event, the compromise of allowing effective national veto saved face and permitted a meaningless deal to be brandished before the public and international partners, suggesting that the process was continuing. Whether it continues will eventually depend on sovereign decision (of course) and therefore the position of the core enthusiasts who promoted the original 2030 draft, Germany, France and Britain must now be examined.

THE ‘CORE ENTHUSIASTS’ – PAST OR PRESENT (GERMANY, SPAIN, FRANCE, BRITAIN)

Germany is the pivotal state for European ‘climate action’ and renewable energy issues because it is also the pivotal state in EU governance, in the Euro crisis, in the Eastern policy versus Putin as well as being the leading experimenter in the push for a ‘green’ energy transition. Therefore the *energiewende* has been discussed from several directions extensively already in this report. In summary, its internal incoherence is steadily poisoning the German economy. The *mittelstand* companies are the back-bone of German industrial strength and are being crucified in the international market. A typical medium-sized German industrial company now pays 9.14 euro cents per kilowatt hour compared with 4.82 cents/kWh in Texas, according to research carried out by Ecofys, a consultancy, and the Fraunhofer Institute for Systems and Innovation Research. The study, commissioned by the German government, is based on prices paid over the past two years.⁵⁴ Claims by German green energy promoters that there is or will be convergence with US energy prices are not convincing.

⁵³ cited in the *Warsaw Business Journal* at <http://wbj.pl/poland-will-veto-40-co2-reduction-piechocinski/>

⁵⁴ J. Vasagar, “German businesses grapple with green energy costs,” *The Financial Times*, 7 Sept 2014.

Actions speak louder than words. So it is telling that several large energy user industries, like the chemicals giant BASF, have both 'off-shored' production to the USA and/or investing in stand-by power-plants. Energy intensive users have also been granted temporary waivers from green charges which helps in the short term but does not create a long-term climate of investor confidence. Heribert Hauck, general manager for energy at Trimet Aluminum, one of Germany's biggest electricity consumers, told *The Financial Times* that "for us, and for the whole economy, the *Energiewende* is an enormous challenge, a gigantic experiment that is not yet at an end." The need to build new coal-fired plant, mentioned earlier, is proof of this.

However Mrs Merkel is surely correct when she announced earlier this year that if any country can accomplish such a massive transformation, then Germany can. Certainly it can draw on its long-established green ethos, much linked to love of forests and entwined with the German search for its sense of *heimat* (home). It is evident in German culture from the nineteenth century German Romantic poets, through Wagner and the early twentieth-century *wandervogel* movements, prominently through the Nazi era which celebrated all the above with gusto (and which is nowadays a suppressed memory) to the modern-day Greens.⁵⁵

The modern German environmental movement first showed itself in the "Atomkraft nein danke!" smiley sun anti-nuclear power protest which was also one of the foundations of the big activist NGOs Greenpeace and Friends of the Earth in the 1970s. *Die Grünen* have become the leading 'green' political movement in Europe. The transition from a dreamy counter-cultural origin to effective and occasionally ruthless machine politics was accomplished through fierce debates between 'fundis' (fundamentalists) and 'realos' (realists) which the 'realos' won. Joschka Fischer was a leader of the Greens for twenty years and his political career mapped that journey. From 1998-2005 he was Germany's Foreign Minister and Vice-Chancellor in Gerhard Schroeder's government in which he learned and practiced the realities of power politics. Latterly he has become a prominent and remorseless advocate of full, organic European political union.

⁵⁵ The most profound and thoughtful recent review of environmentalism, which includes views on the links between environmentalism and fascism is R. Scruton, *Green Philosophy: How to think seriously about the planet*, Atlantic Books, 2012. On Germany see especially pp 235-8,

German opposition to nuclear power is deep and visceral: its basis is emotional rather than rational and Merkel, with her acute political antennae, responded to it in her instant announcement of the “bogus” nuclear switch-off after the Fukushima accident. It was bogus in that Germany continues to import nuclear generated electricity from France and from eastern Europe. Nor is there any rational reason to see transferability of risk from the precise reasons for the Fukushima accident which occurred in an old, poorly laid-out plant on the coast in a high- risk earthquake area to modern nuclear plants in the middle of the European land mass. However observers see no sign that the German de-nuclearisation decision will be easily reversed.

Nor is this the only deep root of Germany’s environmentalism. Germany has a strong and sometimes tragic history of *kadavergehorsam* – ‘body loyalty’ expressed as unthinking social discipline. *Die Grünen* have benefitted from that; and the evangelical ferocity of promotion of the *energiewende* by the idealists who support it will mean that therefore there will have to be considerable, visible and painful damage before the policy is abandoned. Also, there appears to be a third driver propelling this policy. German spokesmen follow the Chancellor’s lead. A sense of atonement can be sensed behind the promotion of the *energiewende*. The case made is that by heroic altruism and cost to themselves, Germans will give a positive lead as another facet of atonement for the twentieth century disasters of world war into which they had previously led the wider world.

So there is little doubt that the experiment will continue. Whether it succeeds (which this report thinks is unlikely both on present evidence, and since it is in defiance of all historical precedent) or fails, we may be grateful to the Germans for conducting it for the lessons that it teaches. The danger associated with the experiment, however, is that because of Germany’s nodal position in the other crises in Europe today, in failing it may contribute unwelcome further variables of instability both to the euro crisis and to the renewed Cold War with Russia within 2015’s critically unbalanced and fragile European scene.

Therefore, for non-European observers of the continent, Germany is the pivot state to watch. Britain, France and Spain are also core enthusiasts - for quite different reasons in each case. They influence different vital aspects of the European energy scene: Britain through its policy and energy-planning experiment; France because of its unique nuclear power sector and associated expertise; Spain because of the scale of the boom and bust in its subsidy-

created domestic renewable market. But no one of these alone can have decisive impact as Germany and the German experience can. Hence the extent of comments on the *energiewende* given here.

The Spanish case is the most straightforward in that the motivation for the boom in its renewables industries, and their bust, already described above in this report, was directly driven by the politics of subsidy. The collapse engendered by Prime Minister Rajoy's January 2012 *volte face* was deemed to be a lesser evil than failure to try to deal with the ravages of the Eurozone. Major Spanish companies like Gamesa have responded by vigorously seeking to develop overseas business to compensate for the loss of home market. That strategy is now, like that of other 'green energy' exporters, facing the unpredicted but predictable – yet to Scarcity Peak Oil believers, unthinkable – eventuality of oil at \$50-\$60 bbl. The Peak Oil narrative is built into their business case assumptions. The challenge will be greatest for wind power exporters because there is already market-equivalent competitiveness for off-grid solar in the sun-belt and in undeveloped economies. But these are essentially still 'niche' markets. Hopes for grid-scaleable solar in the American west have yet to be proven in a domestic market flooded with cheap dispatchable power.

Yet the Spanish case illuminates also another facet of the general European scene that touches directly the future prospects of 'green' politics and policies. The Spanish political class, of which the new EU Energy and Climate Action Commissioner Miguel Arias Cañete is a prominent member, sits on top of a political volcano. Spain today suffers from youth unemployment near 50%, the consequent loss by emigration – for example to Latin America – of many of its brightest young people, a collapse of public confidence in established political parties, soured by major corruption scandals surrounding the ruling Partido Popular, a deeply split population with many younger and better educated people backing the anti-austerity Podemos 'anti-party'. The response of the 'portfolio' parties of Right and Left (Partido Popular and the Socialists) is to begin to consider a common anti-populist front which would formalise the inter-generational as well as cultural division even more clearly.

Such fragmentation is especially evident in the southern European countries (Portugal, Spain, Italy, Greece) that are suffering most grievously from social mayhem created by the Euro crisis; but it is in fact an aspect of a general trend in European politics that has been most fully documented by Peter Mair in

Ruling the Void, his path-breaking study of contemporary European party politics. Since his analysis applies to most other European states – even Scandinavian where there has previously been a much stronger pattern of legitimated and engaged politics – and since the type of politics represented by ‘climate action’ advocacy is also shrewdly analysed in his book, it may be helpful to summarise Mair’s findings here.⁵⁶

Mair’s data documents across all European democracies a trend for voters since 1990 to cease to vote, or if they do vote, to be increasingly likely to switch preferences from one election to the next. This, he argues, is because there is a growing acceptance of depoliticised, technocratic forms of decision-making (of which the UNFCCC/IPCC climate politics and stealth issue advocacy processes are a leading illustration). The logical consequence for political process is that there is an increased tendency for citizens to seek redress of grievances via judicial or quasi-judicial methods, or by media and especially modern ‘social media’ campaigns, rather than by old-fashioned appeal at the ballot box. Insofar as voting is popular, the trend is of a rising demand for referenda, short-circuiting the untrusted political class. Ironically transfer of power to citizens directly, systematically downgrades both the status and influence of any truly independent expert input via political debate and increases the likelihood of stealth issue advocacy because of its polemical power. The ‘climate action’ issue is once again a prime example of this.

Mair summarises this trend to mean that the modern state is viewed more as regulatory and less as participatory. This is reflected in his fascinating finding that across all the established European democracies political party membership has declined on average by 50%, with range from minus 66 to minus 27, since 1980.⁵⁷ In Britain, for example, membership of The National Trust (which cares for historic buildings and landscapes) far exceeds that of any political party, or indeed of several combined. In a longer timescale, in 2014 Europe’s oldest established and most successful election-winning party, the British Conservative party, has 2% of the membership that it had in 1950.

Mair also makes the same point with which this report opened, namely of the role played in the hollowing out of European democracy by the essential character of the EU which has caused it to construct “...a protected sphere in which policy-making can evade the constraints imposed by representative

⁵⁶ P.Mair, *Ruling the Void: the Hollowing of Western Democracy*, Verso, 2013

⁵⁷ Mair, Table 4, ‘Party membership change in established democracies 1980-2009’ p.41

government.”⁵⁸ He too believes that this has aggravated the general trend, because the EU elite’s contempt for the electorate is reciprocated. Therefore it is not surprising to see on the one hand a countervailing response in the current rapid growth of ‘anti-party’ politics in most EU countries, especially ‘core’ countries, and on the other, of nationalist parties in Scotland, Catalonia, Northern Italy and elsewhere. During 2015 a slew of elections will occur. So far announced are in Britain, Spain, Poland, Denmark, Finland, Portugal and Estonia. The Swedish election, also driven by the voiding of the old portfolio parties, has just been cancelled because those parties of Left and Right have combined to see off the threat from the populists to pass the budget. The 2015 elections will further explore the strength of Mair’s hypothesis.

France has, as always, followed a unique path in national energy policy. It has been made possible technically by its highly centralised political and economic decision-making and by the close-knit nature of its elite of ‘enarques’ (graduates of the Ecole Nationale d’ Administration) and culturally by the strong sense of French exceptionalism which, in the Gaullism of the Fifth Republic, combined with vivid but submerged memories of the humiliations of serial defeat (1871, 1914, 1940, 1956) and collaboration with German occupation hidden by the myth of heroic resistance.⁵⁹

Both Great Britain and France had also experienced profound political reactions to the Eisenhower Administration’s irresistible exercise of its power over them in forcing the termination of the Anglo-French military operations to take control of the Suez Canal in 1956 after its nationalisation had been proclaimed by President Nasser of Egypt. In the French case this humiliation reinforced General de Gaulle’s political will to gain and retain the controlling direction of the emergent European project (“the skilful French rider shall steer the sturdy German horse”) which in response to the transatlantic crisis took an accelerated leap forward in June 1957 with signature of the Treaty of Rome. The building of a nuclear deterrent *force de frappe* independent of the USA and an urgent civil nuclear programme (based ironically on American reactors and initially on American fuel) to make France’s energy supplies safe from any future interruption of Middle Eastern and especially trans-Suez oil benefitted from similar impetus.

⁵⁸ Mair, *Ruling the Void*, p.99.

⁵⁹ This unspoken pact of silence was only broken in 1969 with the screening of Marcel Ophuls’ documentary of spoken witness to life in Vichy France, *le Chagrin et la Pitié*.

From the civil nuclear decision sprang one of the swiftest successful national energy transitions of modern times (the other being Japanese). Electricité de France, the national energy company whose majority share-holder is the government, now manages a fleet of 59 power reactors that have nuclearized 75% of French electricity. They were built in two waves, the first – the post-Suez wave - started in 1962 and another, larger wave began to be built under the Messmer plan which was a response to the 1973 oil price shocks.

Problems arose in due course. There was the failure of an intended upgrade route via the Super Phénix fast-breeder programme and – a continuing issue – with block obsolescence of cohorts of reactors. France has experienced fracture issues, clouded in secrecy and intrigue, across the fleets of PWRs. It operates the non communist world's most standardised fleet of power reactors which has obvious advantages but also obvious dangers. The future is also less clear than it once was. Whereas President Sarkozy authorised life-extension beyond 40 years for some reactors, before his presidency descended into chaos in 2014, President Hollande, responding to 'green' tendencies in his Socialist coalition, intimated that he might start a French nuclear phase-out. There has always been a French environmentalist movement but never on the scale or power of its German counterpart, although now growing in support particularly in the rural south west in opposition to hydro programmes.

The French 'campaign' approach to nuclear construction required the rapid development of national nuclear expertise, which was accomplished through the Grandes Ecoles, and of national nuclear construction companies.

Framatome and Cogema were merged into one national champion, Areva, in 2001 which is 78% government owned. However, via Siemens, the German government owns a 34% share of the Areva subsidiary that is developing the third generation EPR (European Pressurised Reactor) which is late on schedule and cost overrun. (There are both Franco-Japanese (Atmea) and Franco-Chinese alternative designs as possible alternatives should the EPR stall.) But this Franco-German relationship and indeed the future of the research trajectory are now in doubt, not only from post Fukushima political fall-out, but also from the grim financial position of Areva and its fractious relationship with EDF. In November 2014 it issued its third profit warning in four months.

This has had knock-on consequences outside France, notably in Finland where Areva is in dispute over the construction of the Olkiluoto EPR (which contributed to its difficulties) and in Great Britain where it is contracted for

10% of the project value to supply EPR technology for the twin reactor Hinkley Point C for which EDF is the lead contractor (although currently reported to be trying to sell on 40% of its stake to two Chinese enterprises).⁶⁰

The astonishing nature of the Hinkley Point C contract is a good bridge to the review of the strange present state and prospects for 'climate action' and renewable energy in Britain. But before we cross it, the conclusion to be noted for France is to reaffirm its world leading position as a nuclear electricity exporter as well as producer and the power of its industrial position both in utility management via EDF and in design and construction. Indeed, some in Brussels trying to build an 'Energy Union' argue that France should sacrifice national self-sufficiency and end load-following operation of its PWR fleet in order to anchor the 'EU energy union' by become the EU base-load producer, buying its peaking power from others.

This plan would help to rescue Germany from its self-harming experiment with non-dispatchable power and could back-stop countries faced with energy blackmail threats from the east. But it would require immense reciprocal political trust which the evidence of the currency union shows is simply not present or in prospect.

Furthermore, the profound political crisis affecting France during the final stages of Francois Hollande's spectacularly chaotic and disruptive presidency may affect foreign partners' assessment of country risk. The 'energy union', rather like the stricken currency union, is to be seen in normal EU manner more as a means to the undeclared end of irrevocable federal political union than solely in its own terms and therefore should be treated with the usual due caution that should be applied to any EU policy. In similar vein, the ambitions of the very lame duck Hollande government in relation to the Paris UNFCCC conference are more likely to be about attracting domestic constituencies than caring much about the substance of the Conference. France's high nuclear power component put it on the side of the carbon reduction angels; so the position of advocacy is relatively cost-free.

⁶⁰ The World Nuclear Association publishes a brief but comprehensive and authoritative history of the French nuclear programmes at <http://www.world-nuclear.org/info/Country-Profiles/Countries-A-F/France/>. On Areva and Hinkley Point see E.Gosden and A Armstrong, "Hinkley Point nuclear plant 'threatened by Areva financial crisis'" *The Daily Telegraph*, 19 November 2014, <http://www.telegraph.co.uk/finance/newsbysector/energy/11242094/Hinkley-Point-nuclear-plant-threatened-by-Areva-financial-crisis.html>

During the 2000s, British politics was in thrall to a political version of load-following power generation. Tony Blair had observed and learned the power of 'triangulation' from the Bill Clinton presidency and perfected the skills of being all things to all men as a way of building coalitions of special interests to make his portfolio Labour party electable and then to keep in power. He gutted it of socialist ideology – even changed its name to 'New Labour' - and made a virtue of riding some of the trends later analysed by Peter Mair in order to govern the deepening void. The appeal of environmental catastrophism, which also reached and passed its apogee in the Blair years, was obvious. If the catastrophist case was accepted, it gave a mandate for extended state intervention into all areas of life, including much personal and private behaviour. This pleased the green activists who gained extensive power in government and it pleased doctrinaire socialists like Blair's great rival and eventual successor, Gordon Brown and his junior acolytes like Edward Miliband. Socialist parties have far less compunction about messing with established constitutional and governance arrangements than conservatives and the Blair/Brown governments surpassed all Labour predecessors in their busyness. Brown was, like Jean Monnet and the proponents of a federal European state, Gramscian in his understanding that in the absence of popular support, irreversible social change is best achieved by a 'long march through the institutions' in western democracies. Accordingly Brown created the structurally incoherent 'Department of Energy and Climate Change' as a vehicle for his protégé Edward Miliband, another doctrinaire socialist and current leader of the British Labour Party. Miliband in turn was responsible through the DECC for shaping the legislative and bureaucratic context for his successors, including passing the 2008 Climate Change Act. History already shows that Brown was simultaneously one of the most damaging and most successful Prime Ministers of recent times: damaging because he ran the economy into a wall and created gigantic debt; successful because he embedded so many laws and institutions that he still controls the terms of British politics – and the actions of his successors - from beyond the political grave. His only conventional success was to prevent Britain entering the Euro, even if his motive was primarily to spite his arch-rival Tony Blair.

David Cameron, a former public relations man, supported in particular by his close adviser Oliver Letwin (who expresses personal zeal about the green agenda), wholly imbibed the Blair doctrine and was once proud to identify

himself as ‘the heir to Blair’. Like Blair, he tried to construct a new identity for his party too and grasped ‘greenery’ as a way of trying to attract the votes of the same sort of people who had voted for Blair. Like Blair, he made a point of scorning his core supporters as a sign of welcome to newcomers. He even changed the symbol of his party to a squiggly green tree. Therefore in opposition he neither contested the terms of climate catastrophism at its apogee but rather embraced them nor criticised any of its structures, like the DECC, nor resisted the Climate Change Act which was therefore passed with bi-partisan votes, even though many Conservative MPs now state that they never believed in it. Given that he failed to win an outright mandate he would have been prevented from dismantling any of this edifice by the junior coalition partners even if he had wished to do so.

The Liberal Democrats were given the Energy and Climate Change brief in the 2010 Coalition as their most extensive Cabinet portfolio and they pushed it with fervour. Their first minister, Christopher Huhne, was succeeded by the less charismatic Ed Davey when, in a celebrated trial, Huhne and his former wife were convicted of perverting the course of justice and imprisoned.

Time has revealed that Cameron’s environmentalism was mainly opportunistic because, as it became clear to him that rather than transform his party, he had in fact lost core support to the ‘anti party’ United Kingdom Independence Party and was not winning the support of the ex-Blairites, he is reported to have ordered his officials early in 2014 to ‘get rid of the green crap.’ He became a fervent but frustrated advocate of fracking, unrealistically hoping for a British economic boost such as the US economy is receiving from shale.⁶¹ Despite the clear approval for well regulated and well engineered fracking given in Sir Robert Mair’s report of June 2012,⁶² a combination of environmental NGOs, media allies and Liberal Democrats mounted a concerted and effective campaign to discredit fracking in Britain, and very little progress has so far been made to exploit rich proven reserves, especially in the north west of England.

⁶¹ Unrealistic because the special conditions that permitted the shale boom in the USA (notably abundant skilled drilling capacity and congenial mineral rights extraction legislation) are not present in Britain.

⁶² Sir Robert Mair, “Shale Gas extraction in the UK,” Royal Society/ Royal Academy of Engineering, June 2012. <https://royalsociety.org/~media/policy/projects/shale-gas-extraction/2012-06-28-shale-gas.pdf>

The majority of Cameron's MPs consistently opposed the Brown government's Gramscian raft of legislation and institutions on 'climate action' which it had inherited. Their leading voice was the Minister of the Environment Owen Paterson MP who nonetheless Cameron sacked in the summer of 2014 precisely because he was so disliked by the environmentalist cabal. Following his sacking, on 15 October Paterson became the first major British politician to call for the repeal of the 2008 Climate Change Act unless there was a general agreement by other nations to act likewise. Taking a similar position to that of the Australian Prime Minister Tony Abbott, like former EU Energy Commissioner Oettinger, quoted earlier, Paterson argued that unilateral actions like this were otherwise self-harming and pointless.⁶³ Paterson' speech also rehearsed the now well-known objections to rent-seeking wind-farm developments, to the incoherence which the combination of *ad hoc* stimuli by FIT subsidy, for example, and failure to take a comprehensive approach to energy policy together produce, increasing the risk that 'the lights will go out'. As earlier detailed, the UK faces tight margins and has responded, rather like Germany, by adopting contorted postures such as maintaining coal-fired plant regardless of emissions issues and at high additional costs.

The absence of any realistic energy planning in Britain for fifteen years, during the hey-day of 'greenery', when combined with accelerated decommissioning of major base-load plants under the EU Large Combustion Plant Directive (6.1 Gw of capacity scheduled to close by 2015⁶⁴) opens a gap for new build requirement. Logically this would be supplied by the cleanest, cheapest dispatchable power which is gas-turbine and perhaps some nuclear plant. But in September 2013, the same Ed Miliband who had occupied DECC under the Brown government had announced at the Labour Party conference that he would freeze energy prices to consumers for 20 months if elected in May 2015. This wiped over a third off the value of energy shares overnight and, as industry sources predicted at the time, has crushed any remaining incentive to build new gas-turbine plants whose profitability was already under pressure both from the Carbon Floor Price and from the structural incentive to use gas-fired stations inefficiently as back-up and peaking power to complement wind, which, when

⁶³ <http://blogs.spectator.co.uk/coffeehouse/2014/10/owen-patersons-speech-on-abandoning-the-2050-climate-change-targets-full-text/>

⁶⁴ <http://www.carbonbrief.org/blog/2013/08/the-uk%E2%80%99s-power-plant-graveyards-what,-where,-and-why/>

blowing, is given priority for political reasons, rather than to run gas-fired plants at maximum efficiency and all the time.

Could new nuclear capacity fill the gap? The manner in which the EDF led consortium was awarded the Hinkley Point C contract announced in October 2013 was astonishing. The consortium was guaranteed a 'strike price' for the electricity to be generated of £92.50 per MWh in 2012 prices, to be cost adjusted for 35 years, the difference of course coming from consumers and taxpayers. While this was a lower strike price than that which the Government was prepared to subsidise for some renewables, it contrasted with the UK market price of £48/MWh at date of contract; and of course that price preceded the most recent fall in world oil and gas prices. One of the country's leading energy economists, Peter Atherton of Liberum Capital, commented that the deal was 'insane'. His analysis deserves quotation in full because it spells out the consequences of believing the Scarcity Peak Oil fallacy when linked to stealth issue advocacy:

Once again, the UK Government is taking a massive bet that fossil fuel prices will be extremely high in the future. If that bet proves to be wrong then this contract will look economically insane when HPC [Hinkley Point C] commissions. We are frankly staggered that the UK Government thinks it is appropriate to take such a bet and under-write the economics of any power station that costs £5m per MW and takes 9 years to build...

As far as we can see this makes Hinkley Point the most expensive power station in the world (excluding hydro schemes) on a per MW basis and also the plant with the longest construction period. By way of contrast, for the cost of £16 billion for the 3,200MW to be built the UK could build 27,000MW of new CCGT gas fired power stations solving the 'energy crunch' for a generation.

Based on the disclosure so far this looks likely to be an outstanding deal for EDF and its partners. On a leveraged basis we expect EDF to earn a Return on Equity (ROE) well in excess of 20% and possibly as high as 35%.

Having considered the known terms of the deal, we are flabbergasted that the UK Government has committed future generations of consumers to the costs that will flow from this deal.⁶⁵

The further woes of the contract, arising from French difficulties, have already been mentioned. Atherton's warning about the riskiness of the 'Peak Oil' gamble has become even more prescient than when he made it; and matters have become worse for the Government which has been caught out in an attempt to suppress inconvenient data which documents unsurprising consequences of basing policy on this fallacy.

In early November, DECC published the 2014 issue of its annual *Estimated Impacts of Energy and Climate Change Policies on Energy Prices and Bills*. The Minister Ed Davey's consistent position had been to insist (in defiance of - or more likely ignorance of - Jevons' Paradox and of evidence) that energy efficiency gains would reduce consumption and therefore overall prices for consumers. The report claimed that consumers would save £90 per year because of DECC's climate change policies.

Examining the report, the Renewable Energy Foundation noticed that the price impact tables which might substantiate this claim, had been removed. (It has subsequently been reliably established that this was not, in fact, a decision made in DECC but was one imposed on it by a more senior Minister close to the Prime Minister). This seemed to REF to be scandalous and accordingly a Freedom of Information request was made, and Parliamentary Questions (PQs) were asked in the House of Lords by Lord Ridley, a Peer who takes a deep interest in energy matters.

DECC refused to supply the information in response to the PQs - itself rather scandalous; but on 11 December after delay and in all probability legal advice, it released the missing tables which have now been published by REF.⁶⁶ These show that DECC calculations in the low fossil fuel price scenario, which now seems to be the most likely, indicate a 40% rise in domestic electricity prices by 2020 rising to 60% by 2030 to pay for the various green energy subsidies, including the Hinkley Point extravagance, compared to prices without DECC policies.⁶⁷ The situation for industry is even more severe. Medium sized

⁶⁵ <http://www.itv.com/news/2013-10-30/ouch-energy-analyst-is-staggered-by-uks-nuclear-deal/>

⁶⁶ <http://www.ref.org.uk/ref-blog/325-decc-publishes-energy-price-impacts>

⁶⁷ R. Mendick, "Green policies to add 40% to the cost of household electricity bills," *The Sunday Telegraph*, 14 December 2014;

companies with obligations under the Carbon Reduction Commitment would see a 70% increase by 2020 over prices without policies, rising to an incredible 114% by 2030. All these price costs would be passed on to consumers, of course.

These are the current Departmental estimates on impacts. How likely are they to come about? The answer to that touches both the larger question of the continuing viability of the EU-wide drivers of such rises and the British domestic questions posed by Owen Paterson, such as the continuation in force of the Climate Change Act targets. That in turn touches upon what may happen in the forthcoming British election. Radically different outcomes are perfectly possible.

If the Conservatives win a clear mandate, then continued British membership of the EU would be in doubt and the possibility of a wholesale dumping of national 'climate change' legislation and actions, rather as the Juncker Commission is doing, is possible. But if the 'anti-party' UKIP manages to split the natural conservative majority of the electorate enough to deprive the Conservatives of outright victory, then Ed Miliband could walk through the middle leading an enfeebled Labour party. He would then depend on coalition partners who, at year's end, look most likely to be the Scottish Nationalists who seem on track to annihilate Labour in its Scottish heartlands. If this happens it would repeat the scenario of 1910 when an enfeebled Liberal administration was forced to dance to the tune of the Irish nationalists.

This scenario has very interesting climate action and energy implications because Scotland is disproportionately important in the rent-seeking renewable energy construction boom, especially of wind-farms. At present, Scotland generates at peak far more power than it requires; but the expensive connector grid to carry this power to England has not been built. It is a similar story to the what has happened in Germany where effort in the *energiewende* has also been invested in the visible and politically attractive shop front – the wind turbines and solar farms – and not in the back-room – the collector loops, offshore connectors, transformers and power lines. (In the German case, TenneT the Dutch TSO and prime contractor for the offshore connectors and for the German north/south spine transmission lines, encountered both technical and financial delays and so compounded the surge problem. The spine lines are still in planning.) What has not yet been appreciated by the press and public is that

<http://www.telegraph.co.uk/news/earth/energy/11292367/Green-policies-to-add-up-to-40pc-to-cost-of-household-electricity.html>

building new interconnectors to reduce constraint payments is actually the more expensive option. The TenneT published reports reveal the scale of this in the German offshore wind case.⁶⁸ Estimates that the system management costs of the UK wind programme would total about £5 billion a year in 2020 are looking still more plausible by the day.

The result has been to produce an extraordinary situation where today Scottish wind-farms are paid more per unit *not* to generate electricity than to do so. 'Constraint' payments to wind farm operators to switch off have sky-rocketed in the UK: from £5.9 million in 2012 to £53 million in 2014. The biggest on-shore wind farm in the UK is Whitelee near Glasgow and during 2014 it was paid more than £20 million to shut off its turbines.

Given the collapse of North Sea oil revenue and the scale of rent-seeking income that Scotland is guaranteed in its two way bet either from selling wind power into the national grid or from obtaining constraint payments for turning off wind turbines so as not to destabilise the grid, the SNP would have every incentive to maintain and increase the present arrangements to the fury of English electors.

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⁶⁸ http://annualreport.tennet.eu/2013/userfiles/pdf/TENNET_Annual_Report_2013.pdf