## Sustainable Development Targets in relation to the TranSust.Scan Models

S Challenges and Targets		IFW DART	WIFO GAIN	IVM - DEMETE R	UniHH EU- FASOM	FEEM ICES	SMASH - IMACLI M	LIFEA W8D/ IMPEC	ECN - MARK EL	ZEW PACE	FEI WĽ H	
licy Area	Targets:	Business As Usual										
Climate C	hange and Clean Energy:			-	•		-	-				
	8% below 1990 levels 2008-12	BAU: By 2030, current energy practice will result in emissions 5% higher by 2030	х			Х		Х	х	х	Х	х
eenhouse ises uissions:	Developed countries reduce emissions by 30% over 1990 by 2020 (with agreement) EU-27 20% without international agreement <sup>ii</sup>	National Energy Forecasts submitted under National Emissions Ceiling Directive (2001/81/EQ <sup>iii</sup>	х			X		Х	х	х	х	x
	By 2050 global emissions reduced by up to 50 % compared to 1990 - reductions in developed countries of 60-80% by 2050	-	х		Х	Х		х	х	x		x
g. global face 1perature:	Not to rise by more than 2°C above pre-industrial levels	IPCC projects BAU emissions will lead to global average temperature is likely to increase by further 1.8 °C to 4°C by 2100 <sup>°v</sup>			Х					+/-		х
rbon pture and questration d Storage	Need for increased R&D in this area to make the prospect of this policy more economically viable <sup>v</sup>	No BAU outlined in relevant Green paper			Х	X						х
newable ergy	12% of energy consumption from renewables by 2010, 15% by 2015. (25% by 2020 <sup>vi</sup> )	Renewable energy is expected to reach a share of between 10.5 and 12.5% in 2020 under BAU. <sup>vii</sup>				х		х		x		x
	21% of electricity consumption by 2010	Under current trends, the EU will miss targets by 1-2 percentage points <sup>viii</sup>				Х		Х		Х		х
ergy iciency	Achieve a 20% saving in EU energy consumption compared to BAU for 2020 (Presidency Conclusions 2007) <sup>ix</sup>	Annual savings of 430-600 million tonnes (Mt) of CO <sub>2</sub> under BAU, with 20% share, savings are 600-900 Mt <sup>x</sup> Outlined in Green Paper on Energy Efficiency.	х					Х		х	х	x
	Overall saving of 9% of final energy consumption over 9 years to 2017 (SDS)	-						?		х		х
ofuels	5.75%/8%/10% of transport fuels to be biofuel by $2010/15/20^{xi}$	Under current trends, the EU will miss first target by 1-2 percentage points <sup>xii</sup>	Not Yet			Х		х				Х
	R&D for 2 <sup>nd</sup> Generation	N/A				Х						Х

			IFW	WIFO	IVM -	UniHH	FEEM	SMASH -	LIFEA	ECN -	ZEW	FEI
licy Area	Targets:	Business As Usual	DART	GAIN	DEMETE R	EU- FASOM	ICES	IMACLI M	W8D/ IMPEC	MARK EL	PACE	WĽ H
Sustainable	e Transport											<u> </u>
couple onomic owth and mand for insport	Infrastructure charging for all modes of transport	EU-25: Most likely transport growth paths 2000-2020: GDP: 52%, Overall freight transport: 50%, Overall passenger transport 35%, Road freight transport 55%, Rail freight transport 13%, Short Sea Shipping 59%, Private car 36%, Rail passenger transport 19%, Air transport 108% <sup>iii</sup>						Х				
	Development of Trans-European Network and Inter-modal links for freight	Following the recommendations of 2003 from Van Miert report on the TEN-T, the Commission compiled a new list of 30 priority projects to be launched before 2010. <sup>xiv</sup> BAU is absence of these?										
	Avg. emissions to be $120gCO_2$ by 2012 for new cars in EU-27							Х				
	Vehicle technology to reduce emissions to 130g/km	CO <sub>2</sub> emissions growth will experience a substantial slowdown, although they will						Х				
	Complementary measures to account for 10g/km	keep on growing with a $15\%$ increase between $2000-2020$ . <sup>xv</sup>						Х				
hieve	New car emissions to 95g/km by 2020							Х				
stainable stainable vels of unsport ergy Use and duce GHG uissions	Van fleet avg. to be 175g/160g by 2012/15	Light and Heavy duty road freight vehicles energy efficiency improved only by 11% between 2000 and 2020 while their traffic will increase by 55% <sup>xvi</sup>						X				
	Use of cost-effective instruments by member states to improve transport energy efficiency	Improvements in car efficiency which - according to the ASSESS study assumptions will improve by 28% between 2000 and 2020. However, expected increase in passenger car transport activity of 36%. <sup>xvii</sup>						+/- (possible)				х
	Member state cars taxes related to $CO_2$ emissions	Present status of this policy is patchy and such taxes have been applied in an <i>ad hoc</i> manner.						+/- (possible)				
duce llutant ission to nimal levels t impact on man/health vironment	Directive 1996/62/EC on air quality and Directive 1999/30/EC on limit values of pollutants in ambient air. EURO III, IV, V for passenger cars set of emission standards for CO, HC, HC+NOx, NOx and PM.	See above, addit ional focus needed on local pollutants.						х	+/- Possible			
odal Shift to vironmentall Iore iendly Modes	Measure to achieve modal shift from road to rail, water and public passenger transport: modal shift coming back to the 1998 modal split for EU-15 and keeping a weight for rail freight traffic of 35% for the new Member States (2001 Transport White Paper) <sup>xviii</sup>	Maintain latest recorded figures in Mid-term Review of the 2001 Transport White Paper. Contiunue 1998-2004 trend?										
	Lower transport intensity through production and logistic process engineering	-										

			IEW/	WIFO	IVM -	UniHH	FEEM	SMASH -	LIFEA	ECN -	ZEW	FEI
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duction of insport ise <sup>xix</sup>	<b>Directive 2002/49/EC</b> environmental noise: Member States to adopt action plans to reduce/limit noise from transport infrastructures.	N/A										
blic insport ter efficiency 2010 <sup>xx</sup>	Acquire less-polluting and more energy efficient vehicles – encourage motor manufacturers in this area <sup>xxi</sup> EURO V –VI (proposed limits for light commercial vehicles)	See above and also EURO IV						Х				
lving Road aths by 10 <sup>xxii</sup>	50,000 deaths to 25,000 by 2010 over 2000	Current trends there would be 32,500 fatalities in 2010 <sup>xxiii</sup>						+/-				
Sustainable	Consumption and Production											
Promote stainable nsumption 1 Production tterns	Promote and disseminate social and eco-innovations, environmental innovations through implementation of Environmental Tech Action Plan: Full implementation of EU legislation such as Eco- design, IPPC, WEEE and RoHS will further enhance eco innovation in the future. <sup>xxiv</sup>	In absence of central plan, analysis of National action plans in this area?										
Conservation	on and Management of Natura	al Resources		1								
prove inagement d Avoiding er- ploitation of tural sources	Implement guidelines set out in the Johannesburg Plan (2002) <sup>xxv</sup> and European Commission Biodiversity Action Plan (BAP), and Biodiversity Strategy of 2006 <sup>xxvi</sup> : Halt biodiversity loss by the end of the decade	Continued biodiversity loss at present trends.				х						
restry	Achieve the 4 UN Objectives on forests by 2015 <sup>xxvii</sup> : 1) Reverse the loss of forest cover through sustainable forest management 2) Enhance forest-based economic, social and environmental benefits, 3) Increase significantly the area of protected forests and other sustainably managed forests, 4) Reverse the decline in official development assistance for sustainable forest management					x						x
cycling	Adoption of life-cycle thinking and promoting reuse and recycling. Specific to waste stream: By December '08 by 55%80% by weight of all packaging waste to be recycled (Directive 2004/12/EC). Extension to 2012 for Gr, Ire, Port and EU10.											
Public Heal	th											
ategy for proving loor air ality ention VOC issions <sup>xxviii</sup>	Directive 1996/62/EC on air quality and Directive 1999/30/EC on limit values of pollutants in ambient air.							+/-	X (for outdoor emission)			

licy Area	Targets:	Business As Usual	IFW DART	WIFO GAIN	IVM - DEMETE R	UniHH EU- FASOM	FEEM ICES	SMASH - IMACLI M		ECN - MARK EL	ZEW PACE	FEI WĽ H
Social Inclu	Social Inclusion, Demography and Migration											
bour Market rticipation <sup>xxix</sup>	Increase participation of women and older works according to Lisbon and Stockholm employment targets by 2020. 70% overall, 60% for women and 50% for older women	Maintain present participation levels?							X (lab part. By age, gender and education			
	Increase labour participation by disabled persons	Maintain present participation levels?										
	Reduce early school leaving to 10%	Maintain present levels?							х			
uth	85% of 22 year olds should have completed upper secondary education	Maintain present participation levels?							х			
um rticipation	Every young person who has left school and is unemployed should be offered job/apprenticeship/additional training within 6 months/4 months by 2007/2010	Maintain present participation levels?							X			
Global Pov	erty and Sustainable Developm	nent Challenges										
verty and stainable velopment	Recommit to targets set out in Johannesburg (2002)							X (T3WP2)	X (inc inequality )			
obal Aid	Raise volume of aid to 0.56%/0.7% of Gross National Income by 2010/2015							X (T3WP2)				

<sup>i</sup> Energy for a Changing World: An Energy Policy for Europe – The Need for Action:

http://ec.europa.eu/energy/energy\_policy/doc/2007\_03\_02\_energy\_leaflet\_en.pdf <sup>ii</sup> European Commission Directorate-General for Environment: EU Action Against Climate Change – Leading Global Action to 2020 and Beyond:

http://ec.europa.eu/environment/climat/pdf/eu\_action\_against\_climate\_change.pdf <sup>III</sup> National emission ceilings for SO2, NOx, VOC and NH3, to be obtained by 2010: http://ec.europa.eu/environment/air/pdf/eu27\_nat\_emission\_ceilings\_2010.pdf

<sup>IV</sup> European Commission Directorate-General for Environment: EU Action Against Climate Change – Leading Global Action to 2020 and Beyond:

http://ec.europa.eu/environment/climat/pdf/eu\_action\_against\_climate\_change.pdf <sup>v</sup> European Commission COM (2005) 105 Final: GREEN PAPER A European Strategy for Sustainable, Competitive and Secure Energy:

http://ec.europa.eu/energy/green-paper-energy/doc/2006\_03\_08\_gp\_document\_en.pdf

<sup>vi</sup> European Commission SEC (2006) 1720: Commission Staff Working Document. Renewable Energy Road Map. Summary of the Impact Assessment.

European Parliament, has called for a mandatory target for renewable energy of 25% of overall energy consumption in 2020 (together with mandatory sectoral targets):

http://ec.europa.eu/energy/energy_	_policy/doc/04_	renewable_	energy	roadmap	summary_
impact_assessment_en.pdf					

<sup>vii</sup> European Commission SEC (2006) 1720 Commission Staff Working Document. Renewable Energy Road Map – Summary of the Impact Assessment: http://ec.europa.eu/energy/energy\_policy/doc/04\_renewable\_energy\_roadmap\_summary\_ impact\_assessment\_en.pdf

viii European Commission Com (2005) 105 Final: GREEN PAPER A European Strategy for Sustainable, Competitive and Secure Energy:

http://ec.europa.eu/energy/green-paper-energy/doc/2006\_03\_08\_gp\_document\_en.pdf <sup>ix</sup> Council of the European Union 7224/07: Presidency Conclusions:

http://www.consilium.europa.eu/ueDocs/cms\_Data/docs/pressData/en/ec/93135.pdf <sup>x</sup> European Commission SEC (2006) 1720 Commission Staff Working Document. Renewable Energy Road Map – Summary of the Impact Assessment:

http://ec.europa.eu/energy/energy\_policy/doc/04\_renewable\_energy\_roadmap\_summary\_ impact\_assessment\_en.pdf

<sup>x1</sup> Energy for a Changing World: An Energy Policy for Europe – The Need for Action:

http://ec.europa.eu/energy/energy\_policy/doc/2007\_03\_02\_energy\_leaflet\_en.pdf xii European Commission Com (2005) 105 Final: GREEN PAPER A European Strategy for Sustainable, Competitive and Secure Energy:

http://ec.europa.eu/energy/green-paper-energy/doc/2006\_03\_08\_gp\_document\_en.pdf

<sup>xiii</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Pa per: <u>http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review\_impact\_assessment\_en.pdf</u>

xiv Community guidelines for the development of the trans-European transport network <u>http://europa.eu/scadplus/leg/en/lvb/l24094.htm</u>

<sup>xv</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Paper <u>http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review</u> impact\_assessment\_en.pdf

<sup>xvi</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Paper <u>http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review</u> <u>impact\_assessment\_en.pdf</u>

<sup>xvii</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Paper <u>http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review\_impact\_assessment\_en.pdf</u>

<sup>xviii</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Paper http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review \_impact\_assessment\_en.pdf

<sup>xix</sup> Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002: relating to the assessment and management of environmental noise http://www.imagine-project.org/bestanden/2002-49-EC.pdf

<sup>xx</sup> Public Passenger Transport Services for Road and Rail:

http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005\_0319en01.pdf

Promotion of Clean Road transport Vehicles:

http://ec.europa.eu/transport/clean/doc/com\_2005\_0634\_en.pdf

<sup>xxi</sup> European Commission Directorate-General for Energy and Transport COM (2005) 265: Doing More With Less – Green Paper on Energy Efficiency: http://ec.europa.eu/energy/efficiency/doc/2005\_06\_green\_paper\_book\_en.pdf

<sup>xxii</sup> European Commission Directorate-General for Energy and Transport: Halving the number of road accident victims in the EU by 2010: A shared responsibility. http://ec.europa.eu/transport/roadsafety\_library/rsap/memo\_rsap\_en.pdf

<sup>xxiif</sup> European Commission, Staff Working Document. Impact Assessment of the Communication "Keep Europe Moving" Sustainable mobility for our continent. Mid-term review of the European Commission's 2001 Transport White Paper <u>http://ec.europa.eu/transport/transport\_policy\_review/doc/2006\_transport\_policy\_review</u> impact\_assessment\_en.pdf

<sup>xxiv</sup> European Commission COM (2007) 162: Report of the Environmental Technologies Action Plan (2005-2006)

http://ec.europa.eu/environment/etap/pdfs/comm\_pdf\_com\_2007\_0162\_f\_en\_acte.pdf

xxvJohannesburg Plan of Implementation: IV. Protecting and managing the natural<br/>resource base of economic and social development.http://www.un.org/esa/sustdev/documents/WSSD\_POI\_PD/English/POIChapter4.htm

<sup>xxvi</sup> European Commission (2001) 162 Biodiversity Action plan for Economic and Development co-operation: <u>http://eur-</u>

lex.europa.eu/smartapi/cgi/sga\_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&nu mdoc=52001DC0162(05)&model=guichett

European Commission COM (2006) 216: Halting the Loss of Biodiversity by 2010 – And Beyond. Sustaining ecosystem services for human well-being :

http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006\_0216en01.pdf

European Commission SEC (2006) 216: Halting the Loss of Biodiversity by 2010 – And Beyond. Sustaining ecosystem services for human well-being. Impact Assessment:

http://ec.europa.eu/environment/nature/biodiversity/current\_biodiversity\_policy/biodivers ity\_com\_2006/pdf/sec\_2006\_607.pdf

xxvii Global Objectives on Forests: http://www.un.org/esa/forests/pdf/session\_documents/unff6/newsreleaseendofsession.pdf

xxviii COUNCIL DIRECTIVE 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations <u>http://eur-</u> lex.europa.eu/LexUriServ/site/en/consleg/1999/L/01999L0013-20040430-en.pdf xxix EU Job Target for 2010: http://ec.europa.eu/employment\_social/news/2002/feb/022\_en.html