

Jobs in green and healthy transport

Making the green shift



International
Labour
Organization



UNITED NATIONS

CONTENTS

Acknowledgments	iii
List of figures	vi
Executive summary	vii
1. Introduction	1
2. The employment effects of expanding public transport in the region of the Economic Commission for Europe.....	4
A. How the expansion of public transport affects employment	4
B. Scenario PT.1: Doubling investment in public transport	7
C. Projections of employment under the PT.1 scenario	7
D. Scenario PT.2: Free public transport	11
E. Projections of employment under the PT.2 scenario	14
F. The employment effects of expanding public transport up to 2050	16
3. The employment effects of electrifying private passenger and freight transport in the region of the Economic Commission for Europe	18
A. The electrification of private passenger and freight transport and its employment effects	19
B. Scenario E.3: Introduction of a voluntary or mandatory target of 50 per cent of all vehicles manufactured to be fully electric.....	22
C. Projections of employment under the E.3 scenario.....	23
D. Scenario E.4: Ban on internal combustion engines for light commercial vehicles	26
E. Projections of employment under the E.4 scenario.....	26
F. The employment effects of electrifying private passenger and freight transport up to 2050.....	29
4. Conclusions.....	30

Annex I: Methodology.....	32
A. Adapting EXIOBASE to represent the transport sector more accurately	32
B. Scenarios modelled for the study.....	33
Scenario PT.1: Doubling investment in public transport	33
Scenario PT.2: Free public transport	34
Scenario E.3: Introduction of a voluntary or mandatory target of 50 per cent of all vehicles manufactured to be fully electric.....	35
Scenario E.4: Ban on internal combustion engines for light commercial vehicles	35
Annex II: Policies to ensure that green and healthy transport is employment-friendly.....	36
A. Fundamental principles and rights at work.....	36
B. Industrial policies	36
C. Skills for the greening of the transport sector	37
D. Social protection and active labour market policies	37
E. Social dialogue	38
Annex III: International labour standards relevant to employment in green and healthy transport	40
Annex IV: Steering Group for the study Jobs in green and <i>healthy transport</i>: Making the shift*	41
References.....	43

LIST OF FIGURES

Figure E.1. Net job creation (in millions) in the transport sector under each of the scenarios modelled in the stud.....	viii
Figure E.2. Net job creation (in millions) in the whole economy under each of the scenarios modelled in the study	ix
Figure 2.1. Relative difference in employment levels between PT.1 scenario (investment in public transport doubled) and business-as-usual scenario, 2030 (%)	8
Figure 2.2. Absolute difference in employment levels between PT.1 scenario (investment in public transport doubled) and business-as-usual scenario, 2030 (million jobs).....	9
Figure 2.3. Difference in employment levels by industry between PT.1 scenario (investment in public transport doubled) and business-as-usual scenario, 2030 (%)	11
Figure 2.4. Relative difference in employment levels between PT.2 scenario (free public transport) and business-as-usual scenario, 2030 (%)	14
Figure 2.5. Absolute difference in employment levels between PT.2 scenario (free public transport) and business-as-usual scenario, 2030 (million jobs).....	15
Figure 2.6. Difference in employment levels by industry between PT.2 scenario (free public transport) and business-as-usual scenario, 2030 (%)	16
Figure 3.1. Relative difference in employment levels between E.3 scenario (50 per cent of vehicles manufactured to be fully electric) and business-as-usual scenario, 2030 (%)	22
Figure 3.2. Absolute difference in employment levels between E.3 scenario (50 per cent of vehicles manufactured to be fully electric) and business-as-usual scenario, 2030 (million jobs).....	23
Figure 3.3. Difference in employment levels by industry between E.3 scenario (50 per cent of vehicles manufactured to be fully electric) and business-as-usual scenario, 2030 (%)	24
Figure 3.4. Relative difference in employment levels between E.4 scenario (100 per cent of light commercial vehicles to be fully electric) and business-as-usual scenario, 2030 (%)	25
Figure 3.5. Absolute difference in employment levels between E.4 scenario (100 per cent of light commercial vehicles to be fully electric) and business-as-usual scenario, 2030 (million jobs).....	26
Figure 3.6. Difference in employment levels by industry between E.4 scenario (100 per cent of light commercial vehicles to be fully electric) and business-as-usual scenario, 2030 (%)	27