

ภาคผนวก ก
ผลจากแบบจำลองแบบ 2 ตัวแปร

Table A 1 Decomposition of the change in energy consumption and energy saving in mining sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -7.60 | 7.60 | 0.00 | 7.60 |
| 2532 | -1.38 | 8.38 | 7.00 | 1.38 |
| 2533 | -6.69 | 8.69 | 2.00 | 6.69 |
| 2534 | -4.82 | 6.82 | 2.00 | 4.82 |
| 2535 | 17.26 | 6.74 | 24.00 | -17.26 |
| 2536 | -4.00 | 12.00 | 8.00 | 4.00 |
| 2537 | -6.07 | 9.07 | 3.00 | 6.07 |
| 2538 | -1.07 | 10.07 | 9.00 | 1.07 |
| 2539 | 2.54 | 7.46 | 10.00 | -2.54 |
| 2540 | 6.64 | -2.64 | 4.00 | -6.64 |
| 2541 | -8.26 | -15.74 | -24.00 | 8.26 |
| 2542 | 33.86 | 11.14 | 45.00 | -33.86 |
| 2543 | -59.41 | 5.41 | -54.00 | 59.41 |
| 2544 | 6.88 | 1.12 | 8.00 | -6.88 |
| 2545 | 6.30 | 6.70 | 13.00 | -6.30 |
| 2531-2545 | -25.83 | 82.83 | 57.00 | 25.83 |

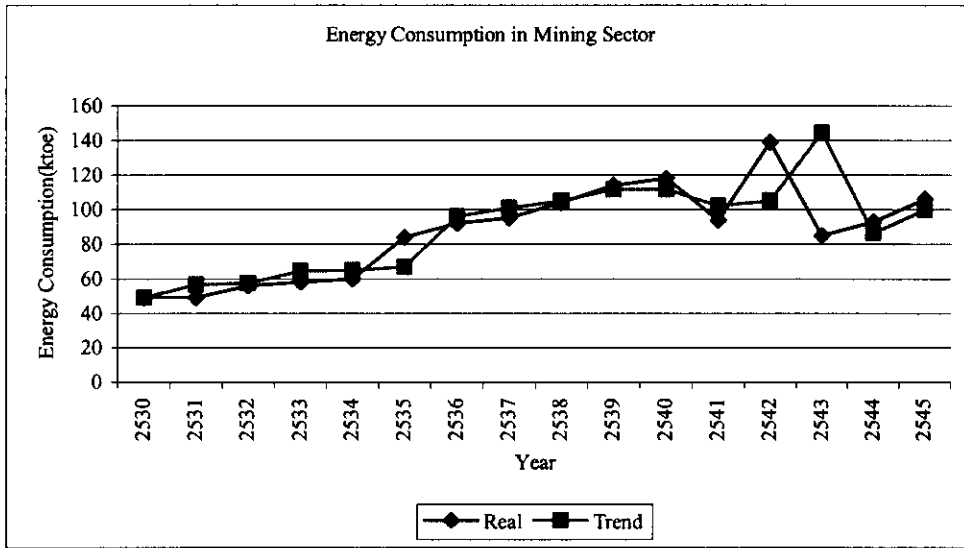


Figure A 1 The trend and real change of energy consumption in mining sector during 2530-2545, 2 dimensional model.

Table A 2 Decomposition of the change in energy consumption and energy saving in construction sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -28.36 | 16.36 | -12.00 | 28.36 |
| 2532 | -6.62 | 16.62 | 10.00 | 6.62 |
| 2533 | 18.67 | 19.33 | 38.00 | -18.67 |
| 2534 | 27.42 | 19.58 | 47.00 | -27.42 |
| 2535 | 6.52 | 19.48 | 26.00 | -6.52 |
| 2536 | -65.66 | 27.66 | -38.00 | 65.66 |
| 2537 | 126.35 | 24.65 | 151.00 | -126.35 |
| 2538 | -90.89 | 30.89 | -60.00 | 90.89 |
| 2539 | 21.90 | 20.10 | 42.00 | -21.90 |
| 2540 | 61.79 | -7.79 | 54.00 | -61.79 |
| 2541 | -57.11 | -46.89 | -104.00 | 57.11 |
| 2542 | -52.30 | 24.30 | -28.00 | 52.30 |
| 2543 | -97.32 | 9.32 | -88.00 | 97.32 |
| 2544 | -22.75 | 1.75 | -21.00 | 22.75 |
| 2545 | 11.68 | 9.32 | 21.00 | -11.68 |
| 2531-2545 | -146.68 | 184.68 | 38.00 | 146.68 |

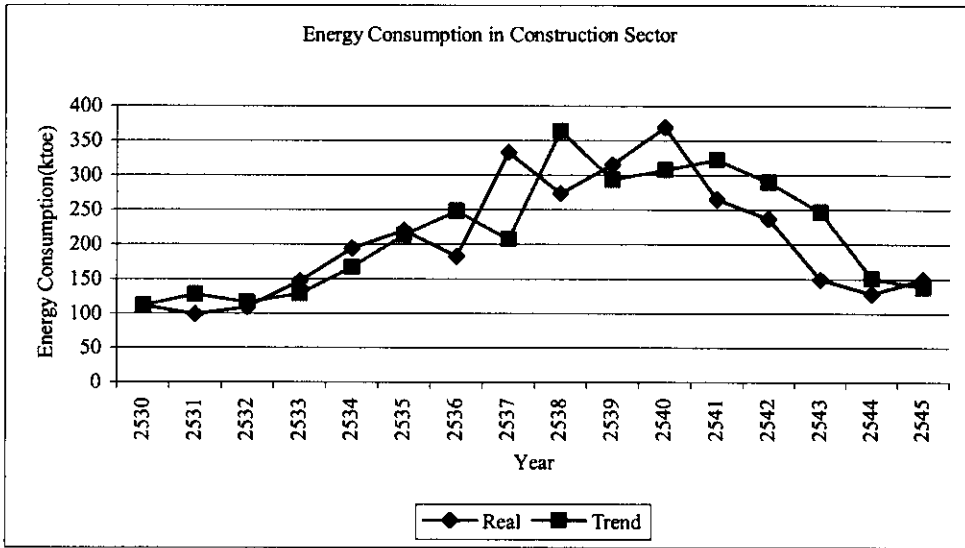


Figure A 2 The trend and real change of energy consumption in construction sector during 2530-2545, 2 dimensional model.

Table A 3 Decomposition of the change in energy consumption and energy saving in manufacturing sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -438.66 | 901.66 | 463.00 | 438.66 |
| 2532 | 555.49 | 1,094.51 | 1,650.00 | -555.49 |
| 2533 | -407.28 | 1,236.28 | 829.00 | 407.28 |
| 2534 | -277.90 | 1,029.90 | 752.00 | 277.90 |
| 2535 | 607.09 | 946.91 | 1,554.00 | -607.09 |
| 2536 | -797.09 | 1,530.09 | 733.00 | 797.09 |
| 2537 | 396.06 | 1,197.94 | 1,594.00 | -396.06 |
| 2538 | 1,033.63 | 1,456.37 | 2,490.00 | -1,033.63 |
| 2539 | 602.91 | 1,131.09 | 1,734.00 | -602.91 |
| 2540 | -1,032.37 | -379.63 | -1,412.00 | 1,032.37 |
| 2541 | -17.59 | -2,214.41 | -2,232.00 | 17.59 |
| 2542 | 326.59 | 1,407.41 | 1,734.00 | -326.59 |
| 2543 | -40.56 | 760.56 | 720.00 | 40.56 |
| 2544 | 505.22 | 208.78 | 714.00 | -505.22 |
| 2545 | 557.78 | 1,199.22 | 1,757.00 | -557.78 |
| 2531-2545 | 1,573.32 | 11,506.68 | 13,080.00 | -1,573.32 |

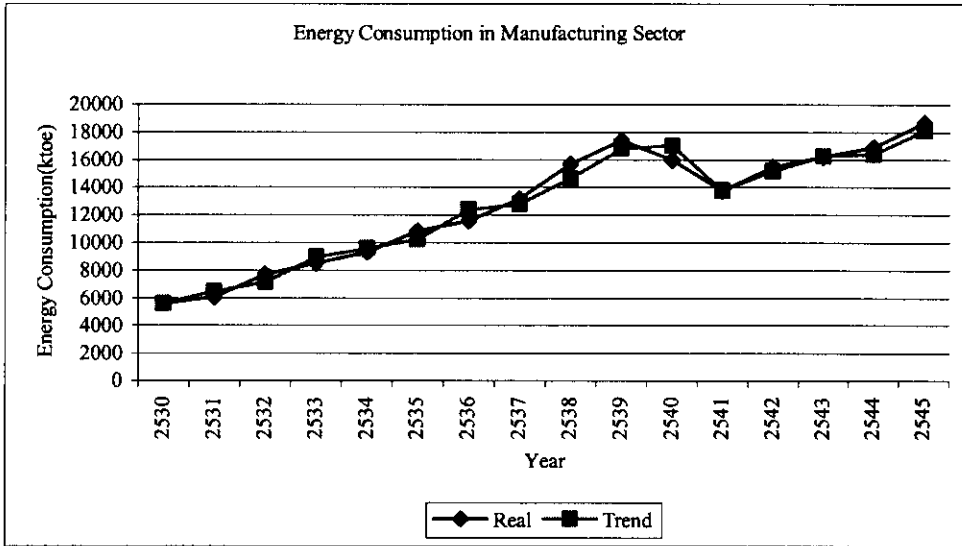


Figure A 3 The trend and real change of energy consumption in manufacturing sector during 2530-2545, 2 dimensional model.

Table A 4 Decomposition of the change in energy consumption and energy saving in industry during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -474.62 | 925.62 | 451.00 | 474.62 |
| 2532 | 547.49 | 1,119.51 | 1,667.00 | -547.49 |
| 2533 | -395.30 | 1,264.30 | 869.00 | 395.30 |
| 2534 | -255.31 | 1,056.31 | 801.00 | 255.31 |
| 2535 | 630.87 | 973.13 | 1,604.00 | -630.87 |
| 2536 | -866.75 | 1,569.75 | 703.00 | 866.75 |
| 2537 | 516.35 | 1,231.65 | 1,748.00 | -516.35 |
| 2538 | 941.67 | 1,497.33 | 2,439.00 | -941.67 |
| 2539 | 627.35 | 1,158.65 | 1,786.00 | -627.35 |
| 2540 | -963.94 | -390.06 | -1,354.00 | 963.94 |
| 2541 | -82.96 | -2,277.04 | -2,360.00 | 82.96 |
| 2542 | 308.15 | 1,442.85 | 1,751.00 | -308.15 |
| 2543 | -197.29 | 775.29 | 578.00 | 197.29 |
| 2544 | 489.35 | 211.65 | 701.00 | -489.35 |
| 2545 | 575.75 | 1,215.25 | 1,791.00 | -575.75 |
| 2531-2545 | 1,400.81 | 11,774.19 | 13,175.00 | -1,400.81 |

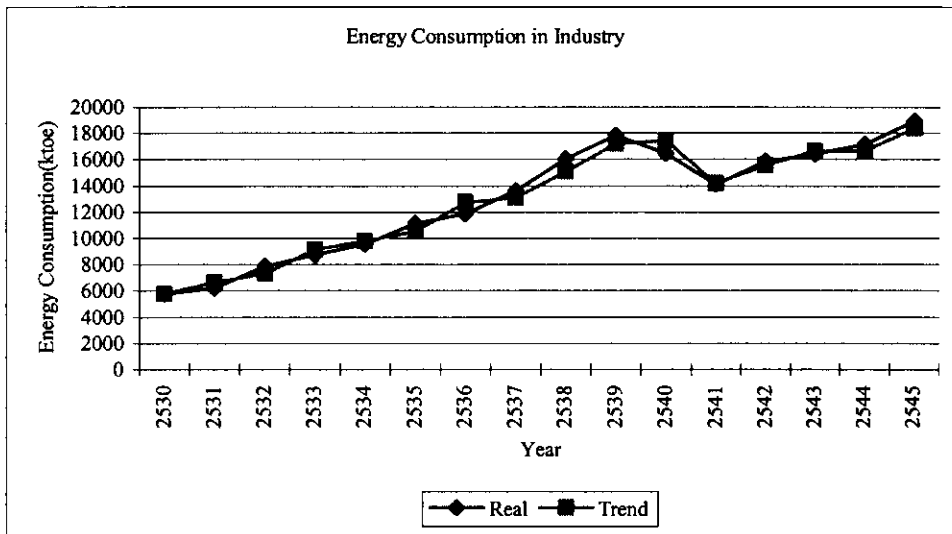


Figure A 4 The trend and real change of energy consumption in industry during 2530-2545, 2 dimensional model.

Table A 5 Decomposition of the change in energy consumption and energy saving in food and beverages sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -388.02 | 417.02 | 29.00 | 388.02 |
| 2532 | 342.25 | 495.75 | 838.00 | -342.25 |
| 2533 | -595.77 | 536.77 | -59.00 | 595.77 |
| 2534 | -212.28 | 414.28 | 202.00 | 212.28 |
| 2535 | 366.59 | 381.41 | 748.00 | -366.59 |
| 2536 | -1,140.85 | 569.85 | -571.00 | 1,140.85 |
| 2537 | -247.15 | 381.15 | 134.00 | 247.15 |
| 2538 | 316.12 | 441.88 | 758.00 | -316.12 |
| 2539 | 370.30 | 349.70 | 720.00 | -370.30 |
| 2540 | -458.07 | -117.93 | -576.00 | 458.07 |
| 2541 | -82.24 | -672.76 | -755.00 | 82.24 |
| 2542 | 59.91 | 422.09 | 482.00 | -59.91 |
| 2543 | 12.30 | 227.70 | 240.00 | -12.30 |
| 2544 | -220.32 | 60.32 | -160.00 | 220.32 |
| 2545 | 243.58 | 336.42 | 580.00 | -243.58 |
| 2531-2545 | -1,633.66 | 4,243.66 | 2,610.00 | 1,633.66 |

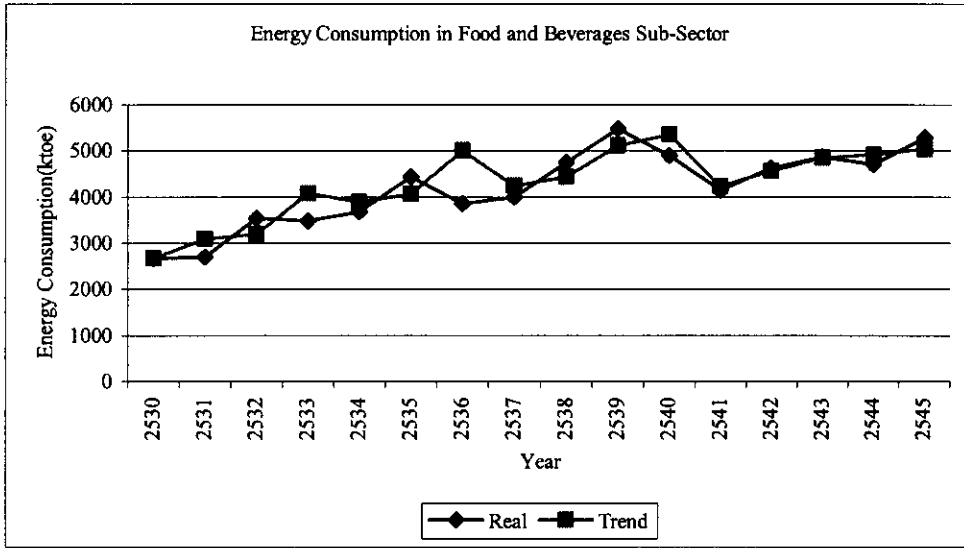


Figure A 5 The trend and real change of energy consumption in food and beverages sub-sector during 2530-2545, 2 dimensional model.

Table A 6 Decomposition of the change in energy consumption and energy saving in textiles sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | 16.05 | 86.95 | 103.00 | -16.05 |
| 2532 | 1.19 | 106.81 | 108.00 | -1.19 |
| 2533 | -104.06 | 111.06 | 7.00 | 104.06 |
| 2534 | 20.31 | 90.69 | 111.00 | -20.31 |
| 2535 | 10.31 | 83.69 | 94.00 | -10.31 |
| 2536 | -55.91 | 132.91 | 77.00 | 55.91 |
| 2537 | 1.80 | 103.20 | 105.00 | -1.80 |
| 2538 | 135.97 | 126.03 | 262.00 | -135.97 |
| 2539 | -302.48 | 87.48 | -215.00 | 302.48 |
| 2540 | -69.58 | -25.42 | -95.00 | 69.58 |
| 2541 | 139.71 | -158.71 | -19.00 | -139.71 |
| 2542 | -42.31 | 104.31 | 62.00 | 42.31 |
| 2543 | -28.05 | 54.05 | 26.00 | 28.05 |
| 2544 | -18.33 | 14.33 | -4.00 | 18.33 |
| 2545 | -55.31 | 77.31 | 22.00 | 55.31 |
| 2531-2545 | -350.71 | 994.71 | 644.00 | 350.71 |

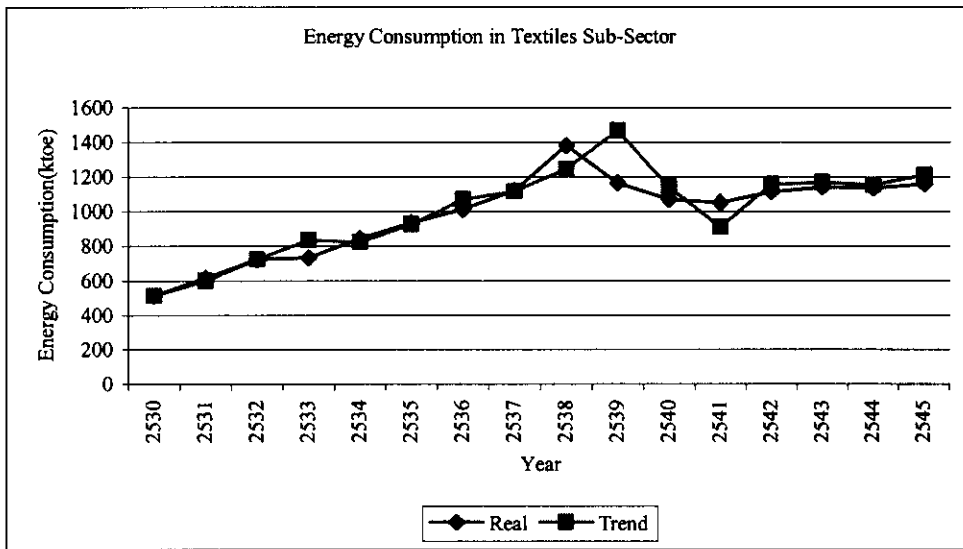


Figure A 6 The trend and real change of energy consumption in textiles sub-sector during 2530-2545, 2 dimensional model.

Table A 7 Decomposition of the change in energy consumption and energy saving in wood and furniture sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | 3.84 | 12.16 | 16.00 | -3.84 |
| 2532 | -13.96 | 13.96 | 0.00 | 13.96 |
| 2533 | -18.86 | 12.86 | -6.00 | 18.86 |
| 2534 | -5.60 | 9.60 | 4.00 | 5.60 |
| 2535 | 9.17 | 8.83 | 18.00 | -9.17 |
| 2536 | 12.13 | 15.87 | 28.00 | -12.13 |
| 2537 | -39.43 | 11.43 | -28.00 | 39.43 |
| 2538 | -12.35 | 10.35 | -2.00 | 12.35 |
| 2539 | -7.89 | 6.89 | -1.00 | 7.89 |
| 2540 | -2.78 | -2.22 | -5.00 | 2.78 |
| 2541 | 10.99 | -13.99 | -3.00 | -10.99 |
| 2542 | 4.48 | 9.52 | 14.00 | -4.48 |
| 2543 | 12.49 | 5.51 | 18.00 | -12.49 |
| 2544 | 30.24 | 1.76 | 32.00 | -30.24 |
| 2545 | -6.66 | 10.66 | 4.00 | 6.66 |
| 2531-2545 | -24.20 | 113.20 | 89.00 | 24.20 |

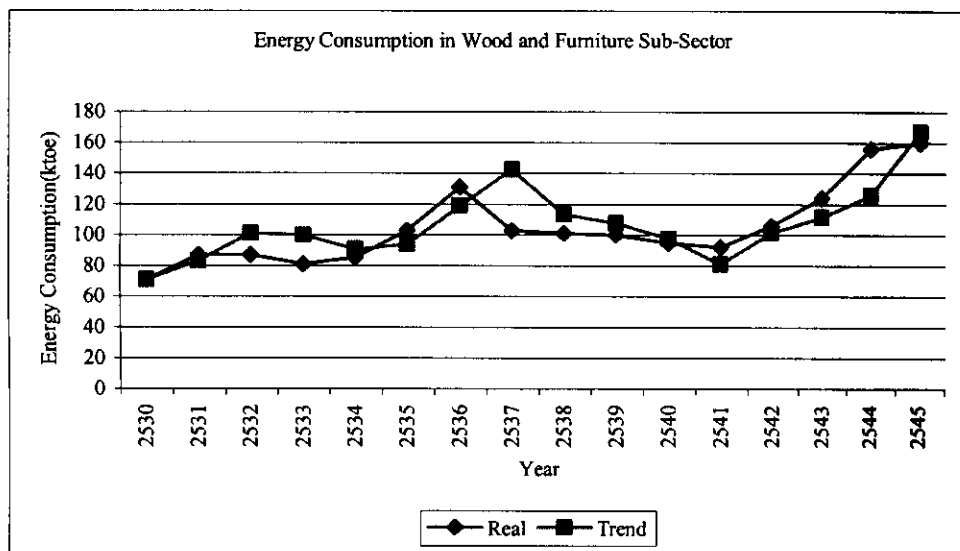


Figure A 7 The trend and real change of energy consumption in wood and furniture sub-sector during 2530-2545, 2 dimensional model.

Table A 8 Decomposition of the change in energy consumption and energy saving in paper sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -7.51 | 35.51 | 28.00 | 7.51 |
| 2532 | 17.34 | 43.66 | 61.00 | -17.34 |
| 2533 | -46.58 | 46.58 | 0.00 | 46.58 |
| 2534 | 45.05 | 39.95 | 85.00 | -45.05 |
| 2535 | -65.46 | 35.46 | -30.00 | 65.46 |
| 2536 | 76.23 | 57.77 | 134.00 | -76.23 |
| 2537 | 144.71 | 57.29 | 202.00 | -144.71 |
| 2538 | -227.66 | 62.66 | -165.00 | 227.66 |
| 2539 | 88.33 | 40.67 | 129.00 | -88.33 |
| 2540 | 31.20 | -15.20 | 16.00 | -31.20 |
| 2541 | 96.91 | -100.91 | -4.00 | -96.91 |
| 2542 | 14.32 | 68.68 | 83.00 | -14.32 |
| 2543 | -88.99 | 34.99 | -54.00 | 88.99 |
| 2544 | -2.87 | 8.87 | 6.00 | 2.87 |
| 2545 | 73.21 | 51.79 | 125.00 | -73.21 |
| 2531-2545 | 148.24 | 467.76 | 616.00 | -148.24 |

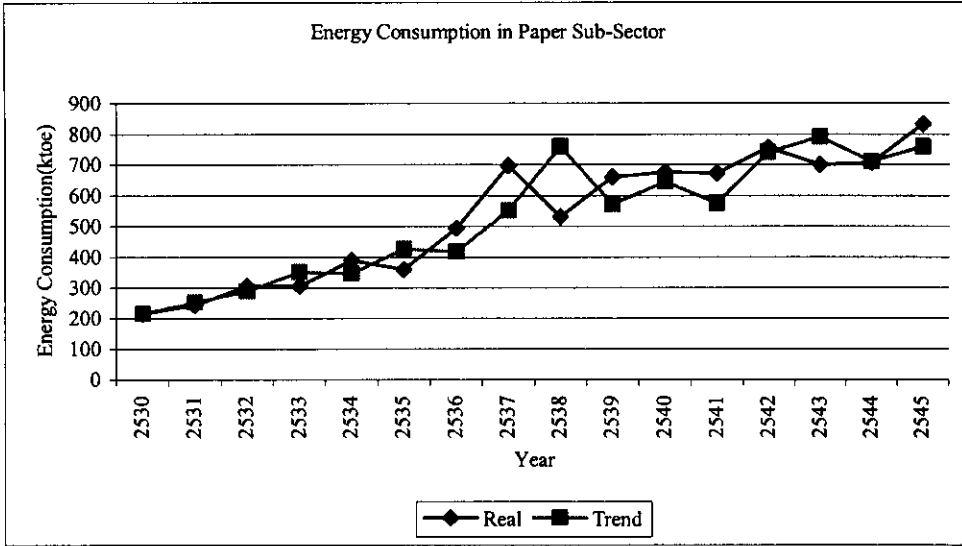


Figure A 8 The trend and real change of energy consumption in paper sub-sector during 2530-2545, 2 dimensional model.

Table A 9 Decomposition of the change in energy consumption and energy saving in chemical sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | 37.33 | 52.67 | 90.00 | -37.33 |
| 2532 | 38.70 | 70.30 | 109.00 | -38.70 |
| 2533 | 104.41 | 89.59 | 194.00 | -104.41 |
| 2534 | 24.94 | 86.06 | 111.00 | -24.94 |
| 2535 | 61.84 | 82.16 | 144.00 | -61.84 |
| 2536 | -83.49 | 132.49 | 49.00 | 83.49 |
| 2537 | 101.79 | 106.21 | 208.00 | -101.79 |
| 2538 | 49.29 | 130.71 | 180.00 | -49.29 |
| 2539 | 450.53 | 113.47 | 564.00 | -450.53 |
| 2540 | -135.75 | -42.25 | -178.00 | 135.75 |
| 2541 | 82.32 | -251.32 | -169.00 | -82.32 |
| 2542 | 293.95 | 176.05 | 470.00 | -293.95 |
| 2543 | -46.66 | 100.66 | 54.00 | 46.66 |
| 2544 | 99.43 | 27.57 | 127.00 | -99.43 |
| 2545 | -162.54 | 151.54 | -11.00 | 162.54 |
| 2531-2545 | 916.08 | 1,025.92 | 1,942.00 | -916.08 |

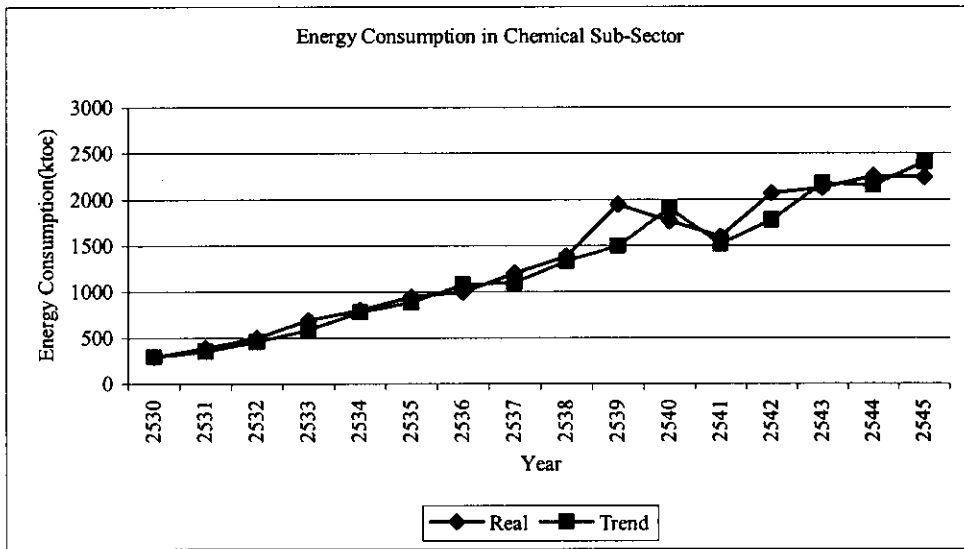


Figure A 9 The trend and real change of energy consumption in chemical sub-sector during 2530-2545, 2 dimensional model.

Table A 10 Decomposition of the change in energy consumption and energy saving in non-metallic sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -80.18 | 207.18 | 127.00 | 80.18 |
| 2532 | 177.60 | 257.40 | 435.00 | -177.60 |
| 2533 | -30.83 | 299.83 | 269.00 | 30.83 |
| 2534 | -102.25 | 252.25 | 150.00 | 102.25 |
| 2535 | 278.74 | 236.26 | 515.00 | -278.74 |
| 2536 | 370.74 | 430.26 | 801.00 | -370.74 |
| 2537 | 53.60 | 366.40 | 420.00 | -53.60 |
| 2538 | 153.55 | 433.45 | 587.00 | -153.55 |
| 2539 | 446.94 | 340.06 | 787.00 | -446.94 |
| 2540 | -216.71 | -118.29 | -335.00 | 216.71 |
| 2541 | -919.91 | -629.09 | -1,549.00 | 919.91 |
| 2542 | 380.17 | 370.83 | 751.00 | -380.17 |
| 2543 | -495.35 | 196.35 | -299.00 | 495.35 |
| 2544 | 722.52 | 54.48 | 777.00 | -722.52 |
| 2545 | 354.30 | 340.70 | 695.00 | -354.30 |
| 2531-2545 | 1,092.93 | 3,038.07 | 4,131.00 | -1,092.93 |

Table A 11 Decomposition of the change in energy consumption and energy saving in basic metal sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -7.66 | 32.66 | 25.00 | 7.66 |
| 2532 | 14.07 | 39.93 | 54.00 | -14.07 |
| 2533 | 4.95 | 46.05 | 51.00 | -4.95 |
| 2534 | -5.95 | 39.95 | 34.00 | 5.95 |
| 2535 | 106.13 | 40.87 | 147.00 | -106.13 |
| 2536 | -27.61 | 72.61 | 45.00 | 27.61 |
| 2537 | -47.21 | 54.21 | 7.00 | 47.21 |
| 2538 | -41.78 | 57.78 | 16.00 | 41.78 |
| 2539 | 87.04 | 43.96 | 131.00 | -87.04 |
| 2540 | -12.19 | -15.81 | -28.00 | 12.19 |
| 2541 | -21.19 | -92.81 | -114.00 | 21.19 |
| 2542 | -28.02 | 56.02 | 28.00 | 28.02 |
| 2543 | 191.16 | 33.84 | 225.00 | -191.16 |
| 2544 | -73.94 | 9.94 | -64.00 | 73.94 |
| 2545 | 156.01 | 57.99 | 214.00 | -156.01 |
| 2531-2545 | 293.81 | 477.19 | 771.00 | -293.81 |

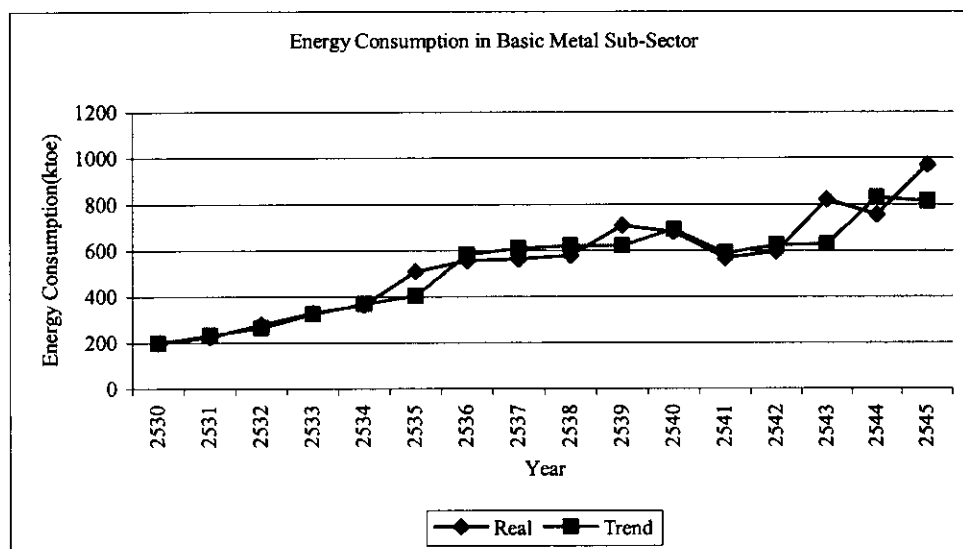


Figure A 10 The trend and real change of energy consumption in basic metal sub-sector during 2530-2545, 2 dimensional model.

Table A 12 Decomposition of the change in energy consumption and energy saving in fabricated metal sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -8.24 | 18.24 | 10.00 | 8.24 |
| 2532 | 17.31 | 22.69 | 40.00 | -17.31 |
| 2533 | 29.94 | 29.06 | 59.00 | -29.94 |
| 2534 | 41.42 | 29.58 | 71.00 | -41.42 |
| 2535 | -60.12 | 26.12 | -34.00 | 60.12 |
| 2536 | 9.52 | 38.48 | 48.00 | -9.52 |
| 2537 | 157.14 | 38.86 | 196.00 | -157.14 |
| 2538 | 98.41 | 58.59 | 157.00 | -98.41 |
| 2539 | 64.99 | 49.01 | 114.00 | -64.99 |
| 2540 | -40.04 | -16.96 | -57.00 | 40.04 |
| 2541 | 70.64 | -104.64 | -34.00 | -70.64 |
| 2542 | 97.21 | 73.79 | 171.00 | -97.21 |
| 2543 | 50.79 | 43.21 | 94.00 | -50.79 |
| 2544 | 96.37 | 12.63 | 109.00 | -96.37 |
| 2545 | 37.02 | 74.98 | 112.00 | -37.02 |
| 2531-2545 | 662.35 | 393.65 | 1,056.00 | -662.35 |

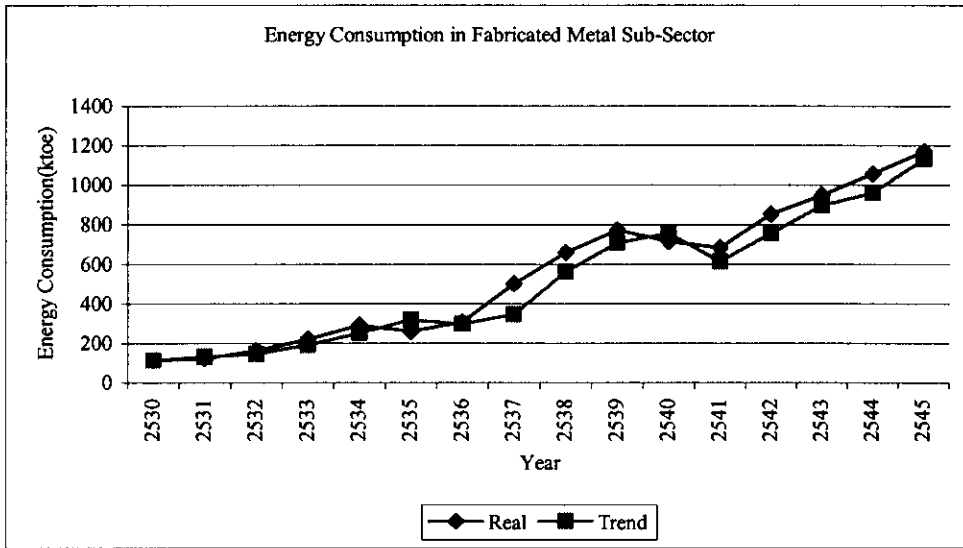


Figure A 11 The trend and real change of energy consumption in fabricated metal sub-sector during 2530-2545, 2 dimensional model.

Table A 13 Decomposition of the change in energy consumption and energy saving in others (unclassified) sub-sector during 2531-2545 (ktoe), 2 dimensional model.

| Year | I_{effect} | GDP_{effect} | Real change | Energy saving |
|-----------|--------------|----------------|-------------|---------------|
| 2531 | -4.27 | 39.27 | 35.00 | 4.27 |
| 2532 | -39.01 | 44.01 | 5.00 | 39.01 |
| 2533 | 249.54 | 64.46 | 314.00 | -249.54 |
| 2534 | -83.55 | 67.55 | -16.00 | 83.55 |
| 2535 | -100.11 | 52.11 | -48.00 | 100.11 |
| 2536 | 42.16 | 79.84 | 122.00 | -42.16 |
| 2537 | 270.82 | 79.18 | 350.00 | -270.82 |
| 2538 | 562.09 | 134.91 | 697.00 | -562.09 |
| 2539 | -594.87 | 99.87 | -495.00 | 594.87 |
| 2540 | -128.44 | -25.56 | -154.00 | 128.44 |
| 2541 | 605.18 | -190.18 | 415.00 | -605.18 |
| 2542 | -453.11 | 126.11 | -327.00 | 453.11 |
| 2543 | 351.75 | 64.25 | 416.00 | -351.75 |
| 2544 | -127.87 | 18.87 | -109.00 | 127.87 |
| 2545 | -81.83 | 97.83 | 16.00 | 81.83 |
| 2531-2545 | 468.47 | 752.53 | 1,221.00 | -468.47 |

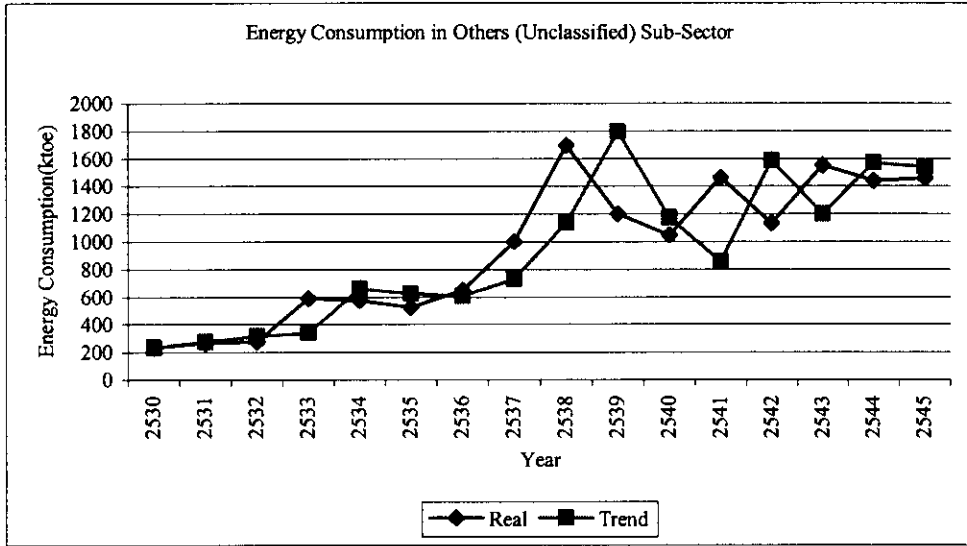


Figure A 12 The trend and real change of energy consumption in others (unclassified) sub-sector during 2530-2545, 2 dimensional model.