When the Scottish Government launched an ambitious "Zero Waste Plan" in June 2010, many readers of the front-page news story undoubtedly thought this was something completely new. It wasn't.

UK cities such as Glasgow did not call what they were doing "resource recovery" in the 1950s, but this is precisely what it was. Indeed, the emerging results of three years of intensive research on "Constructing the waste management business in the United Kingdom and West Germany, 1945 to the early 1990s" are surprising.

Funded by the UK Economic and Social Research Council (RES-062-23-0580), the study demonstrates that, through the mid-1960s, Glasgow and many other UK cities engaged avidly in recycling and re-use... and at levels far beyond those prevalent in a German city such as Frankfurt.

Annual reports from Britain's major public cleansing departments in the decade and a half after the end of the Second World War document systematic sorting and segregation of wastes to recover "salvage" such as paper, glass, textiles and metals. These practices sometimes predated the First World War, but were greatly expanded in the Second, when government regulations made salvage activities mandatory. Wartime shortages and a weakened post-war economy encouraged more intensive pursuit of activities that had originally been started to offset operating costs through selling "salvage".

Mid-20th century resource recovery was driven by a combination of economic, environmental and social considerations. Progressive local authorities invested heavily in what we now call "integrated waste management systems", which segregated collected refuse to recover recyclables and then reduced remaining materials by incineration prior to final disposal. These systems worked well. Besides selling salvaged paper and metals, for example, Birmingham and Glasgow used incinerator heat to generate electricity to recharge the batteries of their electric-drive collection vehicles. Up to 1950 Glasgow public cleansing even sold surplus power to the local electricity supply company. Birmingham and Manchester had plants to convert waste food into animal feed, fertiliser and compost. Income from these activities reduced operating costs, and even things that could not be burned or recycled sometimes had great benefits. Incineration greatly reduced the volume of material to be interred and the residue was immune to malodorous decomposition and the breeding of flies. It even had resource potential, being used to reclaim derelict ground for amenity use and as hard-core for construction projects.

Glasgow and Manchester regularly trumpeted their land-recovery achievements through to the 1960s and there was the added benefit of resource-prolongation through extending the life of tipping sites.

Waste Management Fusion

Here, then, was an apparently successful fusion of waste management imperatives: costs were reduced whilst avoiding health hazards and actively improving the environment - goals familiar to today's practitioners. These examples of best practice 50 years ago may not fully make the case for a "golden age", but they show that domestic waste at the time was widely recognised as having asset potential. Why, then, was there a retreat from these practices after the 1960s and a seeming abandonment of resource awareness?

There were several reasons. First, there was no
legal requirement to engage in resource recovery. War-time regulations compelling all local authorities to undertake some sort of resource retrieval disappeared by the early 1950s. Thus freed, practitioners were sometimes happy to escape the economic uncertainties of trading in recyclables. With no guaranteed prices, market fluctuations could mean losses for cleansing departments whose professional expertise did not necessarily include trading skills. By the early 1960s falling prices for salvaged material meant many cleansing departments struggled to make profits. With growing pressures on budgets, local authority finance committees critically examined the true costs of salvage work. By that time, apart from waste paper, little in the waste stream could generate substantial income.

Social changes also impacted on dustbin contents, particularly through increased affluence and the emerging consumer society. Fewer homes had open-hearth fires to burn domestic refuse, causing more material to go into dustbins. Bin contents, however, became increasingly “non-recyclable” with food wastes commingling with both traditional paper and cardboard wrapping and rapidly increasing quantities of plastic packaging. Sorting waste prior to incineration was increasingly hard to justify. By the mid-1960s, even Glasgow – which considered itself as a leader in waste disposal practice – began to burn everything collected. Non-incinerating cities were no different in abandoning separation: refuse was compacted in collection vehicles and then transferred to landfill sites. By 1970, ideas of resource recovery had receded, swamped by more pressing fiscal and organisational matters. Municipal waste increasingly became conceptualised as a liability.

Proposals to overhaul local government structures mooted in the late 1960s eventually crystallised into the Local Government Act of 1972 with significant implications for municipal waste management. Responsibilities for collection and disposal would be separated, with new regional waste disposal authorities operating after 1974. The drawn-out political process led to planning blight, with local authorities increasingly unwilling to invest in long-term disposal planning since they would eventually lose that responsibility. This did little to promote notions of resource recovery or sophistication in resource management. The new Greater Manchester Waste Disposal Authority, for instance, inherited a collection of municipal incinerators largely either in disrepair or at the end of their working lives. Immediate replacement was impossible because of lengthy construction times and shortages of funds to pay for them. The only alternative was to landfill the raw refuse, whose greater volume threatened rapidly to exhaust available site capacity. The very concept of resource recovery was effectively suppressed as a result.

It may be an exaggeration to say that the mid-1970s heralded a return to the “dark ages” of refuse management, but waste clearly came to be seen as a liability. Its dangers were emphasised by legislation meant to improve its management – the 1974 Control of Pollution Act – and incineration was increasingly hard to justify. The liability concept, harking back in some ways to the 1875 Public Health Act, was undoubtedly encouraged into the 1990s by growing environmental concerns, particularly about disposal by landfill and airborne toxic wastes from incinerators. On the other hand, the Environmental Protection Act of 1990 marked a step forward for national policy in requiring local authorities at least to “consider” recycling in their waste strategies. For the first time since 1945 there was some government direction towards seeing asset value in municipal waste, a move reinforced by the subsequent waste strategy documents and recycling targets, as well as European Union legislation.

Resource recovery from domestic waste is by no means a new idea, even if in its present incarnation it appears far more sophisticated and ambitious than ever before. The concept of “today’s waste as tomorrow’s raw material” would not have surprised the municipal waste practitioners in the late 1940s, some of whom were already looking to transform their profession through more effective management of domestic detritus. Talk of a lost “golden age” may be fanciful, but it is worth remembering some of the reasons why the concept of “resource recovery” had to be rediscovered. Here, the volatility of markets for recyclables and the consequent crucial role of the government in providing direction towards optimising a number of sometimes conflicting goals appear especially important lessons.