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## Exploring Green Human Resource Management: Knowledge-based State of the Art

Green HRM is analyzed in terms of an input–transformation–output model with stakeholders as drivers (= inputs), green HRM practices as mediating variables (= transformation), and company environmental performance (= output). Six research questions are asked and answered, heavily relying on empirical research findings from various international studies. It is shown that green HRM, when properly managed, will pay off through economic and non-economic benefits for both companies and employees. Special attention is drawn to Organizational (Employee) Surveys that enable the direct participation of employees in Green management decision-making.

**Key words:** green HRM, sustainability, corporate social responsibility, drivers of green HRM, green HRM practices, Green work–life balance, environmental performance

### Introduction

The presented article analyzes how companies react to the challenges of environmental protection as well as ecological, economical, and social sustainability by means of HRM, often simply referred to as “Green HRM.” While innovative companies have already introduced a broad variety of green HRM practices, many others are still questioning whether they should react at all for any reason whatsoever. If yes, how? Empirical research findings on the subject can offer some help in making management decisions.

A major goal of providing research findings is a better understanding of green HRM. More attention and interest will and should be attracted to the subject, followed by a strengthened desire to introduce and improve green HRM within com-

panies. Thereby, taking into account the mediating role of green HRM between stakeholder interests and the environmental performance of companies.

Six questions are discussed in some detail. They are based on international research findings:

1. How is green HRM defined and embedded in a theoretical framework?
2. What benefits are expected for the company?
3. Who are the drivers behind green HRM as applied in companies?
4. Which green HRM practices are in use?
5. From empirical research, what is known about the impact of green HRM practices on company environmental performance?
6. Which approaches exist to describe and measure environmental performance, including the contributions of green HRM?

Future research might modify what is known at present. Other limits result from the fact that highly aggregated data do not allow for tailor–made conclusions by the different industrial sectors of industry and sizes of investigated companies. In general it is well understood that green HRM practices that are successfully applied in large companies cannot be translated for small– and medium–sized companies without modification, for example.

## **Green HRM: The HRM Aspects of a Company's Environmental Management**

### **Green HRM: Definition and Underlying Theory**

Following in the footsteps of green marketing, green accounting, green retailing, and green management, there is a growing concern for green HRM, which some also call the HRM aspects of environmental management. It is considered to be “...a new line of research with the aim of organizational environmental management through the HRM practices...” (Gholani, 2016, p. 147). Other approaches to define green HRM stress the content of green HRM, namely “...environmental–friendly HR practices for sustainable use of resources” (Bangwal and Tiwari, 2015, p. 46), or focus on “...its potentiality to influence employees’ green behaviors” (Dumont, 2015, p. 15).

For the purposes of this paper, green HRM is defined as HRM practices designed and applied to promote employee behaviors aimed at improved company–wide environmental performance. The underlying theory is that green HRM covers a set of intermediary variables located between independent (= influencing factors) and dependent variables (= environmental performance of the company). This idea has been the subject of several empirical studies, among them Guerci et al. (2016)

from Italy with an article in *The International Journal of Human Resource Management*—“Translating stakeholder pressures into environmental performance—the mediating role of green HRM practices” (Guerci, 2016, pp. 262–289).

Nonetheless, it is important to note that, in fact, no automatism exists regarding the cause-and-effect chain between stakeholder pressure, green HRM, and environmental performance as described above. For this reason, the decision-making power behind green HRM will receive special attention in Chapter 3 of this article.

Case studies on green HRM highlight that green HRM practices are sometimes found in organizations that are not aware of the term *green HRM*.<sup>1</sup> Therefore, green HRM practices might be much more widespread in the economy than the rather restricted use of the term *green HRM* in business language indicates.

### Integrating Green HRM into the Current Sustainability Discourse

Many researchers discuss green HRM within the framework of sustainability (Lubin and Esty, 2010, pp. 74–85), which revolves around the well-accepted requirement that present needs should be satisfied in such a way so that further generations will not suffer (Hauff, 1987). A more detailed analysis of sustainability identifies three components, sometimes called the “triple bottom line” (TBL) of sustainability (Zaugg, 2009; Fischer and Knepel, 2011, pp. 1–7):

- Ecological sustainability,
- Economical sustainability, and
- Social sustainability.

Green HRM studies consider green HRM to be sustainable per se and a very important generator of sustainability for a company. It is even argued that green HRM has to play the role of the “Sustainability Principle” (Fischer and Knepel, 2011, pp. 1–7). Unfortunately, it is not always clear what kind of sustainability such studies refer to.

Defined in a narrow sense, green HRM refers to ecological sustainability only, for example by reducing waste and air pollution, producing goods and services that do not harm customers, etc. This, however, is not in line with the current mainstream of green HRM research, which displays a preference for a broader understanding of the term by including the TBL as described above.<sup>2</sup>

1 See, for example, Dumont et al. (2015), p. 20.

2 See Chapter 4, which includes the example of a traditional ecological balance and of a more recent sustainability report.

## **Green HRM: An Investment in a Company's Competitiveness or Just One Aspect of Corporate Social Responsibility?**

Beyond ideology, the question is whether green HRM is a “must” or merely a “nice to have.” For innovative companies, green HRM has already become a “must.” They no longer discuss whether green HRM should become reality (Müller–Camen and Zdravkovic, 2012, pp. 1–7). Instead, they already focus on how and to what extent this can and should be achieved. They point to the various benefits for the company and consider green HRM as a long–term investment in the company's competitiveness resulting in positive feedbacks. Others simply do it because their vision, mission, and strategy require green management and green HRM in particular.

More companies, however, consider green HRM to be a part of their corporate social responsibility (CSR) towards society. This comes with a “nice to have” flavor that can be cultivated in good and prosperous times, but will easily be abolished when times become harder. CSR is defined as “situations where a firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams et al., 2006, p. 1).

There is a large third group of companies that follow the tradition that “the business of business is business.” Many of these have either not yet taken green topics into account in management decision–making at all or they consider such topics to be subjects of private interest or of public concern, the latter of which is then thought to require government regulation. If green HRM is in fact introduced, it is done in order to comply with legal requirements. Scientific research needs to rationalize the current discussion and to improve knowledge of the theory and application of green HRM.

## **Employees, Employers, and Other Drivers of Green HRM**

In 2013, a Bain & Company survey on corporate sustainability and philanthropy asked n=746 employees from six countries who they think can effect the greatest change on sustainable business practices (Bain & Company, 2013, p. 2).

They ranked “employers” and “consumers” first and second, followed by “employees” and “government.” As will be explained in the following chapters, those stakeholders can be called drivers of green HRM. Here, the focus lies on the role of employees and employers, who can induce the company to implement and promote green HRM directly, while consumers (customers) and government (regulatory stakeholders) seem to influence green HRM more or less indirectly.

### Employees as Drivers of Green HRM

Employees as drivers of green HRM practices in companies are the subject of several studies. Among them are the empirical green HRM studies from Harrach et al. (2014) and Bain & Company (2013)—both provide remarkable insights into the impact employees can have on green HRM.

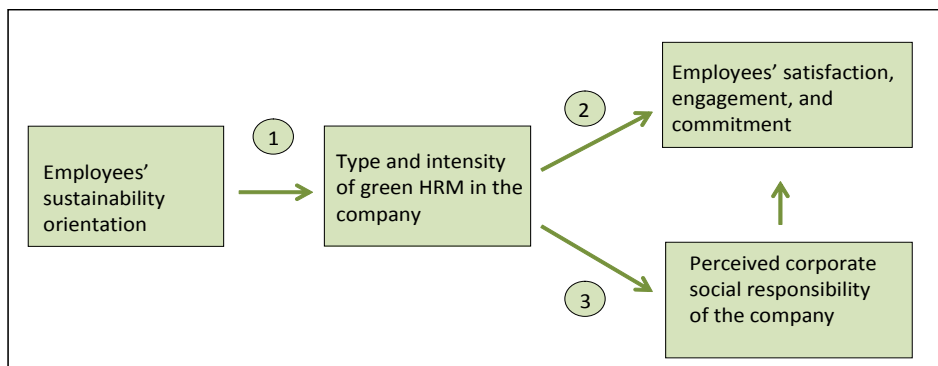
a) The Research Project of Harrach et al. (2014): “Nachhaltig leben und arbeiten” [Living and working sustainably]

An empirical research project at the Technische Universität Berlin (TU Berlin), asked 3042 employees from German-speaking countries about reciprocal effects between “work and life” (Harrach et al., 2014, pp. 12–13). One of the questioned hypotheses was whether employees with an orientation towards sustainability in their private lives seek to implement the corresponding values, attitudes, and behaviors into their professional sphere as well and, in return, show higher work satisfaction, engagement with, and commitment to their employers. With positive correlations between  $r=0.62$  and  $r=0.26$ , the presumed links were confirmed with a high significance ( $p<0,001$ ).

In addition, the survey yielded another equally remarkable result: When employees notice employers’ activities in the field of corporate social responsibility (CSR), they reward such efforts with increased satisfaction, engagement, and commitment. The correlations vary between  $r=0.45$  and  $0.27$  and are highly significant.

The importance of these results for green HRM cannot be overstated (See Figure No. 1 below):

**Figure No. 1:** Employees’ Sustainability Orientation as an Influencing Factor



Source: Author’s original design.

b) Bain & Company Survey on Corporate Sustainability and Philanthropy (2013)

The online survey performed by Bain & Company among 746 employees in six countries—the industrialized countries of Germany, Great Britain, and the United States of America as well as the newly industrialized countries of Brazil, China, and India. It shows that, due to labor deficits, sustainability has become a key topic for human resource management as well. The most important findings can be summarized as follows:

1. “...Roughly two-thirds of respondents ... care more about the topic [of sustainability] now than three years ago...,” including work protection, rejection of child labor, reduction of emissions, and environmentally friendly behavior.

2. More than 50% in the forty and below age group (= nearly 75% of the total number of respondents) declared that the perceived sustainability strategy influenced their choice of current employer. Among the older respondents, 29% stated the same.

3. Ultimately, 15% of all respondents, no matter what their age, declared they would have chosen working for a “green” company over better-paid work for a different company.

4. Another interesting finding of the survey is that “about two-thirds of employees under age 30, one-third of employees over 55, and three-quarters of [sustainability] enthusiasts expect to play a role in how their firm approaches the topic,” that is to shape their company’s sustainability efforts.

Most important for green HRM, however, is the conclusion that “...sustainable practices have become an important means of attracting and motivating top talent” (Bain & Company, 2013, pp. 1–8).<sup>3</sup> The notion of “The Big Green Talent Machine,” selected as the headline of the present Bain & Company survey, points to this aspect of the research.

### Employers as Drivers of Green HRM

Ultimately, whether, how, and to what extent green HRM practices are implemented, is the subject of the management’s decision-making. It is the result either of external pressure, for example from employees, or of original initiatives driven by top managers, HRM departments, or individual supervisors.

<sup>3</sup> See also the German short version of the Bain & Company survey: Globale Bain-Umfrage zum Stellenwert von Nachhaltigkeit bei Arbeitnehmern, accessed August 21, 2013 at <<http://www.presseportal.de> and pm and 19104 and 2539323>, p. 1–3.

In the survey cited above (2013), Bain & Company also studied what leading sustainability companies are doing. They identified three main strategies (Bain & Company, 2013, p. 5):

1. "...Challenge employees to embed sustainability in core operations and at every stage of the business";
2. "...hold employees accountable for sustainable practices in their jobs, and reinforce that responsibility through compensation";
3. "...equip employees with tools and training in order to raise the bar for further improvements".

Chapter 3 of this paper discusses the topic of green HRM practices in further detail.

### Customers as Drivers of Green HRM

Particularly influential drivers of green HRM are a company's customers. Customers increasingly demand more than just high quality products and services, more than a simply timely and flexible delivery, and more than just fair prices. They also call for ecologically friendly and sustainable company behavior. In order to meet the expectations of old and new customers and to increase customer loyalty, more and more companies from all sectors feel the need to deal with environmental problems and to offer environmentally friendly solutions.

The Guerci et al. study (2016) on customer pressure is based on a survey in which the respondents were senior HR managers and supply chain managers from  $n=74$  manufacturing firms as well as service firms operating in Italy. Guerci et al. (Guerci 2016, pp. 262–289) found clear empirical evidence for customer pressure to be having direct impact both on:

- The firm's environmental performance, and
- The implementation of green HRM practices, such as green hiring, green training, green involvement, green performance and compensation, and playing a mediating role between customer pressure and environmental performance.

The relationship between customer pressure and green HRM is highly positive due to the fact that companies address increasing customer pressure by implementing more and better green HRM practices (see Chapter 3).

### Regulatory Stakeholders as Drivers of Green HRM

Regulatory stakeholders include policy makers who can enact laws and regulations that influence the way firms do business. They impose taxes and other financial costs, which also influence company decisions.

The findings of the Guerci et al. survey (2016) confirm the hypothesis that regulatory stakeholder pressure on environmental issues relates positively to environmental performance as well as green HRM practices (Guerci, 2016, pp. 262–289). It must be noted, however, that green HRM practices are only one of several ways to react. Correlations between regulatory stakeholder pressure and green HRM practices, therefore, tend to be lower than expected.

## **Green HRM Practices and Their Impact on a Company's Environmental Performance**

In order to achieve environmental performance goals, companies can use suitable HRM practices. The identification of such green HRM practices and their impact on environmental performance are two major research subjects. In addition, the company's underlying strategy, structure, and culture should be considered as well because the effectiveness and efficiency of green HRM practices heavily depend on them.

### **Strategic Guidelines and Other Prerequisites for Green HRM Practices**

It is well understood that HRM practices should be embedded in a carefully scheduled HR strategy as part of an overall strategic concept to be transformed into action by means of a balanced scorecard (Ackermann, 2000). This holds true for green HRM practices as well.

In order to be truly effective and efficient, green HRM practices need strategic guidelines and principles for actions and procedures. There are pilot studies in the field (Fischer and Knepel, 2011, pp. 1–7; Jackson and Seo, 2010, pp. 278–290; Jackson, 2011, pp. 108–116), but research has to intensify until companies with an interest in green HRM are able to rely on solid support.

Despite a growing number of best practices (Dumont et al., 2015, pp. 15–21), a lack of research also becomes obvious where the anchoring of green HRM in a company's structure and the company culture are concerned. Therefore, many questions regarding the integration of green issues into different company affairs remain unanswered.

### **Main Categories of Green HRM Practices**

Research has identified five categories of green HRM practices (Renwick et al., 2016, pp. 1–16; Renwick et al., 2012, pp. 1–14; Renwick et al., 2008, pp. 1–14; Guerci et al., 2016, pp. 262–289; Bangwal and Tiwari, 2015, pp. 47–49; Cherian and Jacob, 2012, pp. 26–30; Dumont et al., 2015, pp. 17–19; Jackson et al., 2011, pp. 104–108; Mehta and Chugan, 2015, pp. 78–79; Prasad, 2013, pp. 17–18):



**Figure No. 2:** Main Categories of Green HRM Practices

Green HRM Practices	Description
1. Green hiring	Hiring employees with high environmental competencies, high sensitivity to environmental issues, and high motivation to engage in environmental activities.
2. Green training	The most widely adopted green HRM practice. It is directed towards current employees in order to improve environmental performance through awareness campaigns, development of environmental competencies and skills, etc. Due to green training practices, employees should be capable of identify environmental problems as well as deciding on and taking appropriate actions towards the improvement of environmental performance.
3. Green involvement	Employees are provided with the opportunity to apply their green knowledge and abilities, and thereby improve the firm's environmental performance.
4. Green performance management	Sustainability objectives are included in employee performance appraisals and thereby signal the firm's commitment to sustainability to the employees. This is an effective way of providing clear information concerning the role of the employee in the firm's environmental performance achievements. In addition, green performance management is expected to increase the adoption of green behaviors among the employees and to encourage their willingness to propose special initiatives to further environmental activities.
5. Green compensation	Green behaviors of employees are rewarded, hoping that this yields positive consequences for the environmental performance of those employees.

Without going into the details of green HRM practices, it can be asserted that they all aim at either preventing or promoting certain employee behaviors (Zoogah, 2011, pp. 120–122). While “preventive” practice concerns itself with the protection and safety of as well as responsibility for the environment, and focuses on avoiding damages, the second type of practice goes one step further. It is directed towards developing the idea of green HRM and green workplace behavior by searching for new, environmentally friendly problem solutions and implementing them into everyday work procedures, for example.

### Impact of Green HRM Practices on Environmental Performance

The results of the Guerci et al. survey (2016) suggest that all of the above-mentioned green HRM practices are positively related to environmental performance with only the exception of green hiring. The fact that green hiring is not associated with improved environmental performance is rather surprising and, at first glance,

difficult to explain. Guerci et al. suppose that the hiring of employees based on their special environmental skills will only lead to improved environmental performance when certain conditions are guaranteed. They mention:

- Having a high degree of firm–specific green competencies,
- Playing a key role in the firm’s environmental choices,
- Understanding the environmental duties associated with their roles, and
- Perceiving their effort on environmental management as being evaluated and rewarded.

Following these suppositions, green hiring alone is not enough to improve environmental performance, which is in contrast to what the title of the Bain & Company survey “The Big Green Talent Machine”<sup>4</sup> indicates. Other important green HRM practices must be added to green hiring before a company can expect improved environmental performance.

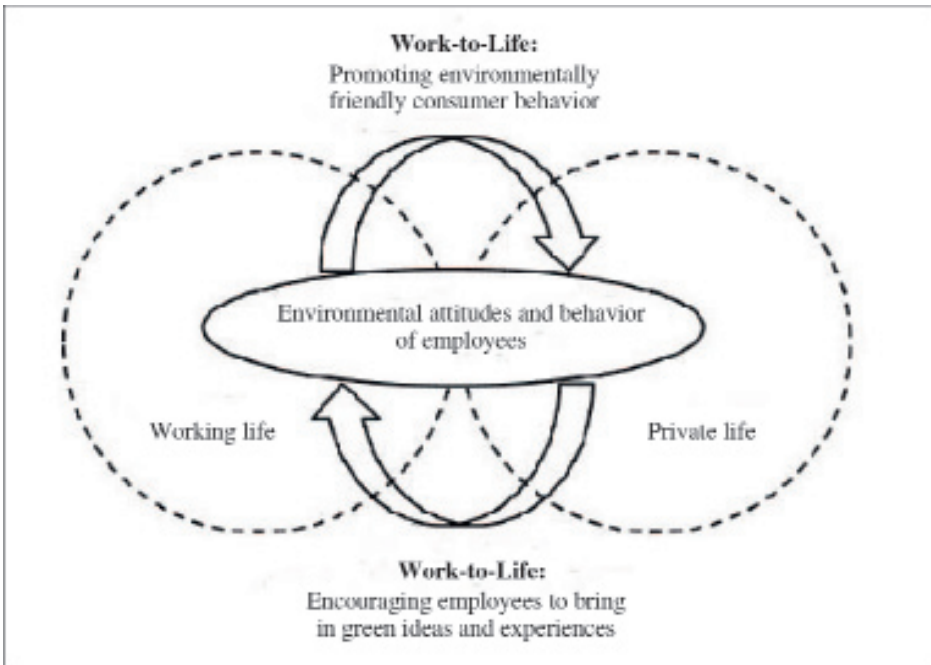
Dumont et al. (2015) offer a similar explanation. They find “...that companies do not formally require employees to have green knowledge or skills prior to employment with the company. However, companies make newly appointed employees aware of the company’s sustainability and environmentally focused values through their induction process and subsequent training activities...” (Dumont et al., 2015, p. 17).

### **The Concept of Green Work–Life Balance**

The green work–life balance concept is proposed as a new perspective for green HRM and is based on established theories of reciprocal interrelations between working life and private life (Muster and Schrader, 2011, pp. 140–156). It is argued that green HRM that focuses only on people’s roles as employees and their work–related behavior is insufficient because environmentally relevant attitudes and behaviors are not learned exclusively at the workplace, but also in private life. Therefore, “in order to successfully promote an environmentally friendly and responsible use of resources at the workplace, green HRM needs to set up activities that support environmentally friendly behavior at the workplace and in private life” (Muster and Schrader, 2011, p. 144).

Muster and Schrader identify two directions in achieving a green work–life–balance, as shown in Figure No. 3 (Muster and Schrader, 2011, p. 148).

4 See Chapter 2.1., p. 6.

**Figure No. 3:** Two Directions in Achieving a Green Work–Life Balance

**Work-to-life interventions** of green HRM include the distribution of relevant information about environmental issues and issuing recommendations for environmentally friendly living. They can, for example, provide green canteen and cooking classes, bike rental services, car sharing programs, etc.

**Life-to-work interventions** seek to encourage employees to introduce and develop their environmental values, ideas, and private experiences in the workplace. In the context of the employees' involvement and participation in green HRM practices, integrating private experiences is considered to be of particular significance.

Generally, work-life balance support is assumed to pay off (Forsyth and Polzer-Debruyne, 2007, pp. 113–123).

### Greening Organizational Surveys and Other HRM Tools

Well-established tools of HRM, such as organizational surveys, can be greened by using the environmental values, ideas, and experiences of the employees for the evaluation and redesign of working conditions with the goal of better aligning them with ecological, economical, and, primarily, social sustainability. From the employees' point of view, organizational surveys provide an opportunity to participate in management decisions (Ackermann, 2011, pp. 80–99) and, therefore, fulfill formal

requirements for co–determination pursuant to laws governing industrial relations in a company (Betriebsverfassungsgesetz). Communicating the idea that organizational surveys can help implement green HRM to the benefit of companies and employees alike should make organizational surveys even more popular and useful for companies from all industry sectors.

The application of organizational surveys in various organizations in recent years has shown many good examples of implementing health management, including risk assessment, into the workplace. Although such a survey can only ever be a first step in risk assessment and needs follow–up audits by health management experts, it becomes increasingly accepted as a valuable tool for achieving social sustainability. Other best practice examples suggest that organizational surveys can also be very helpful in achieving ecological and economical sustainability.

## Results of Company Green HRM Practices

After analyzing the driving factors (Chapter 2) as well as green HRM as a link (Chapter 3), it is important to review results as reflected in, for example, ecological balance sheets or sustainability reports of specific companies.

### Company Environmental Performance in Ecological Balances and Sustainability Reports

#### Example 1: The Ecological Balance Sheet of Kunert AG, 1990

Kunert AG, a well–known producer of brand name clothing, produced one of the first ecological balance sheets in Germany with a lot of media attention. The report focused on quantities and weights of color dyes and chemicals as well as on water, air, energy, and other input factors for textile manufacturing, where each put a different strain on the environment through harmful substances, waste products, wastewater, exhaust air, and energy consumption. The declared goal is to reduce ecological damage and thereby contribute to ecological sustainability (Arndt, 1993, p. 93–104).

The importance of green HRM as an instrument in achieving these ecological goals is only touched upon. According to the authors of the ecological balance sheet, it focused on the benefits for the common weal, cost reductions through reductions in the weights of paper as well as in the use of plastic films, and long–term security in risk prevention for the company. As another benefit of the ecological balance sheet, aside from the generation of publicity, the authors name the creation

of a positive image that has an impact on customers and public authorities, as well as on the *preferences of job applicants*.

Thus, even back then, it was HR marketing that was able to profit from the company's ecologically-friendly behavior. Aside from this though, green HRM is barely recognized as an important prerequisite for the achievement of environmental protection objectives.

### **Example 2: The Sustainability Report of Volkswagen AG, 2016**

A core part of the report is the account of environmental management together with the "Together-Strategie 2025" [Together Strategy 2025], known as the future program, which is substantiated by fields of action as well as strategy objectives and measures. This includes the continuous reduction of polluting CO<sub>2</sub> emissions (carbon footprint) and of the use of resources (less energy and water consumption in the value-added chain, for example). The report highlights that ecological goals and measurements can only be achieved and implemented through the "inclusion of the employees."

The inclusion of employees in environmental management is shaped by the idea that "nur eine informierte und qualifizierte Belegschaft...die aus unserer Umweltstrategie abgeleiteten konkreten Maßnahmen umsetzen und gesetzte Ziele erreichen [kann]" [only an informed and qualified work force can achieve the set goals and practical measures that derive from our environmental strategy] (Volkswagen AG, 2016, p. 76). The report mentions the following HR-related activities in particular:

1. Regular meetings of the environmental protection officers of the European locations;
2. Specially trained experts for environmental protection as direct contact persons and support for production employees;
3. Special professional training for what are known as energy experts, who are supposed to help employees in saving energy;
4. The establishment of monitoring groups and working teams for environmental protection on the various levels of management, and
5. Support of employee inclusion by means of an intranet portal that provides best practice examples.

Thus, Green HRM serves operational environmental management and furthers ecological sustainability. The sustainability report at hand assigns a particular significance to green HRM through the modeling of specific HR-related fields of action with precise strategic objectives as attributes (Volkswagen AG, 2016, p. 123–124):

**Figure No. 4:** Attribution of Precise Strategic Objectives to Fields of Action

Field of Actions		Strategic Objective
1. Employer attractiveness	→	Excellent employer
2. Qualification	→	Competent and committed employees
3. Involvement	→	Promoting performance and sharing successes with employees
4. Work organization	→	Sustainable work organization
5. Leadership and culture	→	Exemplary leadership and business culture
6. HR organization	→	First-class HR organization

These attributes amplify the addressing of the social dimension of sustainability.

### Measuring the Sustainability Image of the Company

The sustainability image as used by Facit Research (Facit Research, 2016) is measured with the help of three major indicators on a scale of 0 to 100:

- (1) Ecological Image Score, also called Green Image Score,
- (2) Economics Image Score, and
- (3) Social Image Score.

The **Ecological Image Score** indicates how the company is perceived from an ecological point of view in terms of environmentally friendly management of resources, application of environmentally friendly technologies and products, etc. Whether and to what extent such objectives are truly achieved and communicated depends on the applied green HRM and its effects on the employees' behaviors.

The **Economics Image Score** reflects the customers' perception of whether a company seems fair and trustworthy or is open for dubious business practices or even corruption. Without a doubt, this score is also influenced by green HRM practices and the resulting behavior of everyone involved.

The **Social Image Score** answers the question of whether a company offers good working conditions and safe employment opportunities and also whether it assumes corporate social responsibility.

All three scores combined result in an all-encompassing **Sustainability Image Score** that allows for company and industry rankings. From a list of 105 firms from various industries, below are the rankings of automobile manufacturers according to their Sustainability Image Scores on a scale of 0 to 100, based on a total sample of n=15399 respondents.

**Figure No. 5:** Sustainability Image Score

Rank	Company	Sustainability Image Score 2016
6	BMW	74.48
16	Toyota	72.12
31	Mercedes-Benz (Daimler)	70.18
36	Nissan	69.59
39	Audi	69.25
52	Renault	67.30
63	Ford	65.89
86	Opel	62.21
88	VW	59.73

Although it is not possible to measure the precise impact of green HRM practices on each company's Sustainability Image Score, green HRM practices are expected to play a predominant role. If this is true, all companies listed above are advised to improve their green HRM, especially the lower-ranked companies.

### Final Remarks and Conclusions

In 2012, based on a review of nineteen studies from the years 1992–2012, Cherian and Jacob summarized the benefits an organization can gain as a result of introducing green HRM principles as follows (Cherian and Jacob, 2012, p. 31):

- Improvement in the retention rate of employees,
- Improvement in public image,
- Improvement in attracting better employees,
- Improvement in productivity and sustainability,
- Reduction in the environmental impact of the company, and
- Improved competitiveness and increased overall performance.

Now, five years later, scientific studies have delivered even more results that suggest that the introduction of green HRM does pay off. Whether this is true or not and which specific circumstances are required for a successful introduction should be the subject of further intense scientific research in the near future.

Our conclusion is that there are good economic reasons for the companies to introduce Green HRM which, properly managed, will pay off. Environmental performance and sustainability need effective and efficient green HRM for goal accomplishment. How this can and should be done is described in some detail by empirical research. The findings also suggest that organizational (employee) surveys may be used to strengthen direct participation of the employees in the ongoing process of greening management decision-making in the companies.

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## **Badania nad zielonym zarządzaniem zasobami ludzkimi.**

### **Stan według współczesnej wiedzy**

#### Streszczenie

Analiza zielonego ZZL dokonana została w ramach modelu ‘bodziec-przekształcenie-skutek, w którym interesariusze stanowią czynnik sprawczy (= bodziec), praktyki zielonego ZZL to zmienne pośredniczące (= przekształcenie), a efektywność ekologiczna przedsiębiorstwa to wynik działania (= skutek). Odpowiedzi na sześć pytań badawczych postawionych w artykule opierają się w głównej mierze na ustaleniach empirycznych pochodzących z różnych badań międzynarodowych. Artykuł wykazuje, że odpowiednio zarządzane zielone ZZL dają korzyści ekonomiczne i pozaekonomiczne zarówno przedsiębiorstwom jak i pracownikom. Szczególna uwaga została poświęcona znaczeniu badań organizacyjnych (pracowników), które umożliwiają pracownikom bezpośrednią partycypację w zielonych procesach podejmowania decyzji zarządczych.

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